

WBS No: 1HAJ10
Activity ID: 1HAJ100001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

WBS No:	1HAJ10	Title:	Radiological Safety Program Direction									
Activity ID:	1HAJ100001	Description:	Rad Safety Program Direction FY01									
								Cost Risk	2	Schedule Risk	1	
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Rad. Protection Program Direction	1.00	each	HC	9.250	9.250	355.848	283.012	0	638.860	169.739	808.599
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	42.775	42.775	0	42.775
Total for Activity 1HAJ100001:						9.250	355.848	283.012	42.775	681.635	169.739	851.374

Line Item 1 - Rad. Protection Program Direction

BOE	ITEM DESCRIPTION: The operation of K-H Oversight of Radiation Protection Program, Site ALARA Program Integration and Assessment of Site Radiation Protection Program. Source of Data: Managers discretion and vendor quotes Unit cost: 3 Management Oversight 1850 X 3 Management discretion 2 Administrative 1850 X 2 Management discretion 2 Assessors \$315K Vendor quote 2 Rapid Response Vehicles \$9K Professional judgement Technical Meeting Travel \$2K 2 trips on demand Registration for Meetings \$2K 2 trips on demand Office Supplies \$2K 250.00 per employee Operational Supplies \$14K Assessor supplies, replacement of 1 failed computer system This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.											
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	K238S Radiation Protection	Linear	1.850.00	Hours
Factors	1850	HOURS					
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K238S Radiation Protection	Linear	1.850.00	Hours
Factors	1850	hours					
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K238S Radiation Protection	Linear	1.850.00	Hours
Factors	1850	hours					
	750	STRAIGHT TIME BASE	M030 MANAGEMENT INTEGRATORS (GR	K238S Radiation Protection	Linear	1.850.00	Hours
Factors	1850	HOURS					
	750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFF	K238S Radiation Protection	Linear	1.850.00	Hours
Factors	1850	HOURS					
	A55	SOURCE ONE	0000 NONE	K238S Radiation Protection	Linear	65.00	Dollars
Factors	1	box	65 dollars				
	A5C	SUPPLIES	0000 NONE	K238S Radiation Protection	Linear	15.570.00	Dollars
Factors	15000	dollars	1.038 Use tax				
	A5H	SUBCONTRACTED SRVS	0000 NONE	K238S Radiation Protection	Linear	254.877.30	Dollars
Factors	315000	dollars					
	A5L	RENTALS	0000 NONE	C242S Transportation	Linear	8.500.00	Dollars
Factors	8500	dollars					
	A5M	TRAVEL/TRAIN/RELOCAT	0000 NONE	K238S Radiation Protection	Linear	2.000.00	Dollars
Factors	2000	dollars					
	A5R	MISC EXPENSES	0000 NONE	K238S Radiation Protection	Linear	2.000.00	Dollars
Factors	2000	Dollars					

Line Item SYS - Contingency And Escalation

BOE

Resources	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	25.772.01	Dollars
	<i>Factors</i> 25772.0 Dollars								

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ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	17.003.03	Dollars
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Factors 17003.0 Dollars

Activity ID: 1HAJ100002 Description: Rad Safety Program Direction FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Rad. Protection Program Direction	1.00	each	HC	9.250	9.250	355.848	283.012	0	638.860	125.614	764.474
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	113.966	113.966	0	113.966
Total for Activity 1HAJ100002:						9.250	355.848	283.012	113.966	752.826	125.614	878.440

Line Item 1 - Rad. Protection Program Direction

BOE	ITEM DESCRIPTION: The operation of K-H Oversight of Radiation Protection Program, Site ALARA Program Integration and Assessment of Site Radiation Protection Program. Source of Data: Managers discretion and vendor quotes Unit cost: 3 Management Oversight 1850 X 3 Management discretion 2 Administrative 1850 X 2 Management discretion 2 Assessors \$315K Vendor quote-Enercon 2 Rapid Response Vehicles \$9K Professional judgement Technical Meeting Travel \$2K 2 trips on demand Registration for Meetings \$2K 2 trips on demand Office Supplies \$2K 250.00 per employee Operational Supplies \$14K Assessor supplies, replacement of 1 failed computer system This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.
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Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	K238S Radiation Protection	Linear	1.850.00	Hours
Factors 1850 Hours					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K238S Radiation Protection	Linear	1.850.00	Hours
Factors 1850 hours					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K238S Radiation Protection	Linear	1.850.00	Hours
Factors 1850 hours					
750 STRAIGHT TIME BASE	M030 MANAGEMENT INTEGRATORS (GR	K238S Radiation Protection	Linear	1.850.00	Hours
Factors 1850 Hours					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	K238S Radiation Protection	Linear	1.850.00	Hours
Factors 1850 Hours					
A54 SEMA	0000 NONE	K238S Radiation Protection	Linear	65.00	Dollars
Factors 1 box 65 dollars					
A5C SUPPLIES	0000 NONE	K238S Radiation Protection	Linear	15.570.00	Dollars
Factors 15000 dollars 1.038 use tax					
A5H SUBCONTRACTED SRVS	0000 NONE	K238S Radiation Protection	Linear	254.877.30	Dollars
Factors 315000 dollars					
0.80913 [SYS 061400] .80704 - System					
A5L RENTALS	0000 NONE	K242S Occup Safety & Indus Hygiene	Linear	8.500.00	Dollars
Factors 8500 Dollars					
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	K238S Radiation Protection	Linear	2.000.00	Dollars
Factors 2000 dollars					
A5R MISC EXPENSES	0000 NONE	K238S Radiation Protection	Linear	2.000.00	Dollars
Factors 2000 Dollars					

Line Item SYS - Contingency And Escalation

BOE											
Resources	<i>Cost Element</i>			<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>	
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department		Linear	78.241.52	Dollars
	<i>Factors</i> 78241.5 Dollars										

WBS No: 1HAJ10
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ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	35,724.97	Dollars
Factors	35725	Dollars						

Activity ID: 1HAJ100003 Description: Rad Safety Program Direction FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Rad. Protection Program Direction	1.00	each	HC	3.735	3.735	155,544	83,738	0	239,282	53,818	293,100
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	81,058	81,058	0	81,058
Total for Activity 1HAJ100003:						3.735	155,544	83,738	81,058	320,339	53,818	374,158

Line Item 1 - Rad. Protection Program Direction

BOE	ITEM DESCRIPTION: The operation of K-H Oversight of Radiation Protection Program, Site ALARA Program Integration and Assessment of Site Radiation Protection Program. Source of Data: Managers discretion and vendor quotes Unit cost: 1 Management Oversight 1850 X 1 Management discretion 1 Administrative 1850 X 1 Management discretion 2 Assessors \$315K Vendor quote-Enercon 2 Rapid Response Vehicles \$9K Professional judgement Technical Meeting Travel \$2K 2 trips on demand Registration for Meetings \$2K 2 trips on demand Office Supplies \$1K 250.00 per employee Operational Supplies \$1K Assessor supplies This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G040 SECRETARIES	K238S Radiation Protection	Linear	1,245.05	Hours
Factors	1850 Hours		0.673 unilateral reduct			
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K238S Radiation Protection	Linear	1,245.05	Hours
Factors	1850 hours		0.673 unilateral reduct			
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K238S Radiation Protection	Linear	1,245.05	Hours
Factors	1850 hours		0.673 unilateral reduct			
	A55 SOURCE ONE	0000 NONE	K238S Radiation Protection	Linear	43.74	Dollars
Factors	1 box	65 box	0.673 unilateral reduct			
	A5C SUPPLIES	0000 NONE	K238S Radiation Protection	Linear	1,397.15	Dollars
Factors	2000 dollars	1.038 Use tax	0.673 unilateral reduct			
	A5H SUBCONTRACTED SRVS	0000 NONE	K238S Radiation Protection	Linear	73,884.18	Dollars
Factors	160000 dollars		0.673 unilateral reduct	0.848 FY00 adi up recon		
	A5L RENTALS	0000 NONE	C242S Transportation	Linear	5,720.50	Dollars
Factors	8500 Dollars		0.673 unilateral reduct	0.80913 [SYS 061400] .80704 - System		
	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	K238S Radiation Protection	Linear	1,346.00	Dollars
Factors	2000 dollars		0.673 unilateral reduct			
	A5R MISC EXPENSES	0000 NONE	K238S Radiation Protection	Linear	1,346.00	Dollars
Factors	2000 Dollars		0.673 unilateral reduct			

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	58,581.21	Dollars
	Factors 58581.2 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	22,476.45	Dollars
	Factors 22476.5 Dollars									

Activity ID: 1HAJ100004 Description: Rad Safety Program Direction FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
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1	Rad. Protection Program Direction	1.00	each	HC	2.394	2.394	127.954	93.234	0	221.188	36.083	257.271
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	36.665	36.665	0	36.665
Total for Activity 1HAJ100004:						2.394	127.954	93.234	36.665	257.853	36.083	293.936

Line Item 1 - Rad. Protection Program Direction

BOE	ITEM DESCRIPTION: The operation of K-H Oversight of Radiation Protection Program, Site ALARA Program Integration and Assessment of Site Radiation Protection Program. Source of Data: Managers discretion and vendor quotes Unit cost: 1 Management Oversight 1850 X 1 Management discretion 1 Administrative 1850 X 1 Management discretion 1 Assessors \$160K Vendor quote-Enercon 2 Rapid Response Vehicles \$9K Professional judgement Technical Meeting Travel \$2K 2 trips on demand Registration for Meetings \$2K 2 trips on demand Office Supplies \$1K 250.00 per employee Operational Supplies \$1K Assessor supplies This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.											
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Resources	Cost Element		Skill		Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	1.196.95	Hours
Factors	1850 hours				0.647 unilateral reduct			
	750 STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	1.196.95	Hours
Factors	1850 HOURS				0.647 unilateral reduct			
	A55 SOURCE ONE	0000	NONE	K238S	Radiation Protection	Linear	42.06	Dollars
Factors	1 box		65 box		0.647 unilateral reduct			
	A5C SUPPLIES	0000	NONE	K238S	Radiation Protection	Linear	1.343.17	Dollars
Factors	2000 dollars		1.038 use tax		0.647 unilateral reduct			
	A5H SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	83.761.58	Dollars
Factors	160000 DOLLARS				0.647 unilateral reduct			
	A5L RENTALS	0000	NONE	C242S	Transportation	Linear	5.499.50	Dollars
Factors	8500 dollars				0.647 unilateral reduct			
	A5M TRAVEL/TRAIN/RELOCAT	0000	NONE	K238S	Radiation Protection	Linear	1.294.00	Dollars
Factors	2000 dollars				0.647 unilateral reduct			
	A5R MISC EXPENSES	0000	NONE	K238S	Radiation Protection	Linear	1.294.00	Dollars
Factors	2000 Dollars				0.647 unilateral reduct			

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	11.962.65	Dollars
	Factors 11962.7 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	24.702.23	Dollars
	Factors 24702.2 Dollars									

Activity ID: 1HAJ100005

Description: Rad Safety Program Direction FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Rad. Protection Program Direction	1.00	each	HC	0	0	0	131.341	0	131.341	0	131.341
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	70.082	70.082	0	70.082
Total for Activity 1HAJ100005:						0	0	131.341	70.082	201.423	0	201.423

Line Item 1 - Rad. Protection Program Direction

BOE	ITEM DESCRIPTION: The operation of K-H Oversight of Radiation Protection Program, Site ALARA Program Integration and Assessment of Site Radiation Protection Program. Source of Data: Managers discretion and vendor quotes											
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Unit cost: 0 Management Oversight 1850 X 0 Management discretion
0 Administrative 1850 X 0 Management discretion
1 Assessors \$161K Vendor quote-Enercon
0 Rapid Response Vehicles \$0K Professional judgement
Technical Meeting Travel \$0K 0 trips on demand
Registration for Meetings \$0K 0 trips on demand
Operational Supplies \$1K Assessor supplies

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	0000	Skill	0000	Department	Curve	Quantity	Units
A5C	SUPPLIES		0000	NONE	K238S	Radiation Protection	Linear	1.038.00	Dollars
Factors	1000	dollars		1.038	use tax				
A5H	SUBCONTRACTED SRVS		0000	NONE	K238S	Radiation Protection	Linear	841.50	Dollars
Factors	16	BOXES		65	DOLLARS				
							0.80913	[SYS 061400]	.80704 - Svstem
A5H	SUBCONTRACTED SRVS		0000	NONE	K238S	Radiation Protection	Linear	129.461.50	Dollars
Factors	160000	DOLLARS							
							0.80913	[SYS 061400]	.80704 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	0000	Skill	0000	Department	Curve	Quantity	Units
CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	49.735.34	Dollars
Factors	49735.3	Dollars							
ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	20.346.75	Dollars
Factors	20346.8	Dollars							

Activity ID: 1HAJ1000P2 Description: Rad Safety Program Direction FY00

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Rad. Protection Program Direction	1.00	each	HC	3.341	3.341	128.544	161.998	0	290.542	62.730	353.272
Total for Activity 1HAJ1000P2:						3.341	128.544	161.998	0	290.542	62.730	353.272

Line Item 1 - Rad. Protection Program Direction

BOE

HISTORICAL DATA SOURCE: K-H P&I Reports: " Labor Actuals (Hrs)From 10/1/98 - 3/1/1999, and the ODC report for Non-Labor dollars from 10/1/98-9/30/98 and 10/1/98-3/1/99 for the staff currently holding the position herein.

ITEM DESCRIPTION: The operation of K-H Oversight of Radiation Protection Program, Site ALARA Program Integration and Assessment of Site Radiation Protection Program.

BREAKDOWN OF HISTORICAL DATA:
Item: Radiation Protection
Unit - K-H Labor (750)
Unit Cost - 3,528 (1,469=5 months actuals * 294 hrs/months)
Unit Cost Adjustment Factor - 1.03%
Revised Unit Cost - 3,620 Hrs.
Basis for Adjustment - The actual labor hours required for 2 FTEs in FY2000 are 3,528 hrs with a 3% escalation based on the assumption that the position in FY98 was not filled for 6 months.

Item - Supplies (A5C Total \$13,000)
Unit - 1a
Unit Cost - N/A
Unit Cost Adjustment - N/A
Revised Unit Cost - \$2,268
Basis for Adjustment - Vendor Quote
Vendor Name - A-1 Custom Trophies
Date of Quote - March 10, 1999
Quote Received by - Ed Wilkes
Description of item being quoted - 1000 white 11 ounce coffedd mugs with 3-color logo
Availability - in stock items will be purchased

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Item - Supplies
Unit - 1b
Unit Cost - N/A
Unit Cost Adjustment Factor - N/A
Revised Unit Cost - \$2,325
Basis for Adjustment - Vendor Quote
Vendor Name - Sparkles Premium Incentives
Date of Quote - March 10, 1999 (Catalog)
Quote Received by - Ed Wilkes
Description of item being quoted - 2,500 Bic Pens 3-color logo
Availability - in stock items will be purchased

Item - Supplies
Unit - 1c
Unit Cost - N/A
Unit Cost Adjustment Factor - N/A
Revised Unit Cost - \$5,000
Basis for Adjustment - Vendor Quote
Vendor Name - Various
Date of Quote - March 10, 1999
Quote Received by - Ed Wilkes
Description of item being quoted - 100, \$50 Gift Certificates at several restaurants in Denver/Golden/Boulder
Availability - N/A

Item - Supplies
Unit - 1d
Unit Cost - N/A
Unit Cost Adjustment Factor - N/A
Revised Unit Cost - \$2,900
Basis for Adjustment - Vendor Quote
Vendor Name - Wearguard, Inc.
Date of Quote - March 10, 1999 (catalog)
Quote Received by - Ed Wilkes
Description of item being quoted - 50 Jackets with 3-color embroidered logo. 3 different types of jackets, depending on award recipient's preference
Availability - in stock items will be purchased

Item - Supplies
Unit - 1e
Unit Cost - \$500 based on 2 FTEs @ \$250 each
Unit Cost Adjustment Factor - N/A
Revised Unit Cost - N/A
Basis for Adjustment - N/A

Unit - Subcontractor Support (A5H)
Unit Cost - \$438,000
Unit Cost Adjustment Factor - 30%
Revised Unit Cost - \$308,000
Basis for Adjustment - The unit cost was adjusted down due to changes support from 3 FTEs to 2 FTEs
a) Aggregate hourly rate of \$159.25/hr for period 10/1/99 to 6/30/00 (2 personnel at 1,496 hours = \$238,238)
b) Aggregate hourly rate of \$164.03/hr for period 7/1/00 to 9/30/00 (2 personnel at 424 hours = \$69,548).
Vendor Name - Enercon Services Company
Date of Quote - March 10, 1999
Quote Received by - Wil Zurliene
Description of item being quoted - Radiation Protection Department Performance Assessment Support.
Other Pertinent Information - Current Contract # KH700332MK
Availability - N/A

Item - Travel/Training (A5M)
Unit - 1
Unit Cost - \$3,202
Unit Cost Adjustment Factor - 30%
Revised Unit Cost \$2,200
Basis for Adjustment - Unit cost adjusted down because Health Physics Society Annual Meeting will be held in Denver.

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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	668.28	Hours
Factors	1850	DOLLARS		0.67401 JANUARY 2000 EARNED VALUE	0.53595	--- FY00 May Earned Value Factor			
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	668.28	Hours
Factors	1850	hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	668.28	Hours
Factors	1850	hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
	750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (GR	K238S	Radiation Protection	Linear	668.28	Hours
Factors	1850	DOLLARS		0.67401 JANUARY 2000 EARNED VALUE	0.53595	--- FY00 May Earned Value Factor			
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	K238S	Radiation Protection	Linear	668.28	Hours
Factors	1850	DOLLARS		0.67401 JANUARY 2000 EARNED VALUE	0.53595	--- FY00 May Earned Value Factor			
	A52	TENERA	0000	NONE	K238S	Radiation Protection	Linear	87.90	Dollars
Factors	164	DOLLARS		0.53595 --- FY00 May Earned Value Factor					
	A53	E-2	0000	NONE	K238S	Radiation Protection	Linear	4,504.64	Dollars
Factors	8405	DOLLARS		0.53595 --- FY00 May Earned Value Factor					
	A5C	SUPPLIES	0000	NONE	K238S	Radiation Protection	Linear	3,403.53	Dollars
Factors	6118	dollars		1.038 use tax	0.53595	--- FY00 May Earned Value Factor			
	A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	16,283.00	Dollars
Factors	16283	Dollars		EOY adjustment					
	A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	132,895.80	Dollars
Factors	247964	dollars		0.53595 --- FY00 May Earned Value Factor					
	A5L	RENTALS	0000	NONE	C242S	Transportation	Linear	4,019.61	Dollars
Factors	7500	Dollars		0.53595 --- FY00 May Earned Value Factor					
	A5R	MISC EXPENSES	0000	NONE	K238S	Radiation Protection	Linear	803.92	Dollars
Factors	1500	Dollars		0.53595 --- FY00 May Earned Value Factor					

Activity ID: 1HXXXJ0005

Description: Rad Safety Program Direction FY06

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Rad. Protection Program Direction	0.96	each	HC	0	0	0	126.733	0	126.733	0	126.733
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	107.289	107.289	0	107.289
Total for Activity 1HXXXJ0005:						0	0	126.733	107.289	234.022	0	234.022

Line Item 1 - Rad. Protection Program Direction

BOE	ITEM DESCRIPTION: The operation of K-H Oversight of Radiation Protection Program, Site ALARA Program Integration and Assessment of Site Radiation Protection Program. Source of Data: Managers discretion and vendor quotes Unit cost: 0 Management Oversight 1850 X 0 Management discretion 0 Administrative 1850 X 0 Management discretion 1 Assessors \$161K Vendor quote-Enercon 0 Rapid Response Vehicles \$0K Professional judgement Technical Meeting Travel \$0K 0 trips on demand Registration for Meetings \$0K 0 trips on demand Operational Supplies \$1K Assessor supplies This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.
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Resources										
	Cost Element			Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES		0000	NONE	K238S	Radiation Protection	Linear	1.038.00	Dollars
	Factors	1000	dollars		1.038	use tax				
	A5H	SUBCONTRACTED SRVS		0000	NONE	K238S	Radiation Protection	Linear	841.50	Dollars
	Factors	16	BOXES		65	DOLLARS				
		0.80913 [SYS 061400] .80704 - System								
A5H	SUBCONTRACTED SRVS		0000	NONE	K238S	Radiation Protection	Linear	129.461.50	Dollars	
Factors	160000	DOLLARS								

0.80913 [SYS 061400] .80704 - System

WBS No: 1HAJ10
Activity ID: 1HXXXJ0005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1HAJ
*

Starts In FY *

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	79.021.65	Dollars
Factors 79021.7 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	28.267.71	Dollars
Factors 28267.7 Dollars								

WBS No: 1HAJ20 Title: Radiological Health
Activity ID: 1HAJ200001 Description: Radiological Health FY01

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
HIS-20C7	HIS-20	1.00	each	HC	1.234	1.234	40.771	179.134	0	219.905	19.448	239.353
MTNHIDN501	Bioassav Sampling	1.00	ea	HC	2.793	2.793	82.074	7.431	0	89.505	39.149	128.655
MTNHIDN502	In-Vivo Counting	1.00	ea	HC	3.727	3.727	107.004	50.536	0	157.539	51.041	208.580
MTNHIDN503	Intake & Dose Assessment	1.00	ea	HC	1.412	1.412	46.482	77.975	0	124.458	22.172	146.630
MTNHIDN504	Internal Dosimetry Program Admin	1.00	ea	HC	4.400	4.400	141.428	10.241	0	151.669	67.461	219.130
MTNHIDS501B5	Routine Whole Body Dosimetry	1.00	each	HC	13.236	13.236	290.666	299.640	0	590.306	138.648	728.954
MTNHIDS503B6	Nuclear Accident Dosimetry	1.00	each	HC	150	150	4.956	5.304	0	10.260	2.364	12.624
MTNHIDS504B7	External Dose Reconstruction	1.00	each	HC	1.700	1.700	56.168	0	0	56.168	26.792	82.960
MTNHIDS506B8	External Dosimetry Program Admin	1.00	each	HC	3.922	3.922	131.513	0	0	131.513	62.731	194.244
MTNHIDU501C8	Radiological Records Files Maintenance	1.00	ea	HC	3.717	3.717	79.762	2.600	0	82.362	38.046	120.408
MTNHIDU502C9	Annual Report to DOE	1.00	ea	HC	686	686	18.241	0	0	18.241	8.701	26.941
MTNHIDU503C10	Annual Exposure Report Cards to Individuals	1.00	ea	HC	625	625	16.426	0	0	16.426	7.835	24.262
MTNHIDU504C11	Other Required Reports	1.00	ea	HC	636	636	16.755	0	0	16.755	7.992	24.747
MTNHIDU505C12	Radiological Records Program Admin	1.00	each	HC	3.102	3.102	104.779	14.703	0	119.482	49.980	169.462
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	123.096	123.096	0	123.096
Total for Activity 1HAJ200001:						41.340	1.137.025	647.564	123.096	1.907.685	542.361	2.450.046

Line Item HIS-20C7 - HIS-20

BOE

BOE Type HC
Source of Data:
Item Desc: HIS-20 System Support
Line Item Scope All dose information is stored in an electronic format as well as hard copy. The electronic format allows for reporting, tracking and trending of dose information, and provides a back-up for the hard copy information. The electronic databases require programming support from sub-contractors to maintain and improve the system. This activity provides for programming support based on experience gained in FY99 and anticipated needs for the HIS-20 database.
Breakdown of Historical Cost Data: Item: HIS-20 Support Units: 1 lot Unit Cost: 1,234 hours \$255,300 in ODCs: \$249,576 in subcontracted services and \$5,724 training/travel. Labor: 750: R632S [P080] 1224 hrs./yr. Provides HIS-20 system manager and computer security officer functions. Provides database administrator support functions including development of specialized queries, correcting data problems, providing support for database enhancements.
Non-labor: A5H: Dyncorp I&E software Engineer 4 Database support for database development, development of reports, special reports, database & software modifications (\$140,265). A5H: Dyncorp I&E database administrator support for database management, and maintenance (\$57,616). A5H: Canberra support for software phone support based on FY99 actuals (\$37,695) and software program enhancements anticipated (\$14,000). A5M: Travel for 1 to the HIS-20 Users Group Meeting in Meridan, CT per quote from RMRS Corporate travel on 3/1/99 (airfare \$511, hotel/per diem \$540, rental car \$260) A5M: Oracle database training for HIS-20 (2 local classes) based on price sheet from training class (\$4,413).

WBS No: 1HAJ20
Activity ID: 1HAJ200001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Activity Filter *

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Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.234.00	Hours
Factors	1234	hours						
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	91.529.27	Dollars
Factors	113120	dollars						
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	40.052.14	Dollars
Factors	49500	dollars						
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	30.500.31	Dollars
Factors	37695	dollars						
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	11.327.88	Dollars
Factors	14000	dollars						
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	S100S	SSOC Salaried	Linear	1.311.00	Dollars
Factors	1311	dollars						
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	S100S	SSOC Salaried	Linear	4.413.00	Dollars
Factors	4413	dollars						

Line Item MTNHIDN501 - Bioassay Sampling

BOE

Source of Data:

Item Desc: Bioassay Sampling

Line Item Scope

Bioassay is the determination of the quantities of radioactive materials in the bodies of workers by the measurement of these materials in the excreta (urine or feces). The bioassay task is broken down into sub-tasks. Subtasks include identifying who requires sampling, generating requests, tracking submission, tracking laboratory performance, reviewing data, formulating conclusions, and reporting the data. Routine Bioassay measurements are those samples collected on a periodic basis, and Special Bioassay measurements are those samples collected as a result of incidents or as part of an investigation into a potential intake of radioactive materials. The time estimates required for Internal Dosimetry to perform each sub-task are based on experience and judgment.

The number of analyses for the routine bioassay program is based on current FY00 levels of approximately 3,200 Radiation Worker II-qualified employees. It is anticipated that there will be 2,600 of these radiation workers in FY01 who will also have a current respirator fit. The FY01 budget request assumes that only this later population will be urine sampled for plutonium (2,600 analyses). In addition, approximately 160 of these workers are also designated for participation in the Uranium Workgroup Monitoring Program and will be sampled for uranium. For the rest of the Site, bioassay requirements for uranium and tritium are to be determined on a job-specific basis and are in addition to the annual plutonium requirement. It is anticipated that 50 such analyses will be required. It is also assumed that 90 analyses will be necessary to monitor workers with old intakes for purposes of possible re-evaluation. In addition, approximately 250 special fecal and 100 special urine samples will be required to support potential intake investigations. Ten percent of the analyses will require validation for quality control. This task provides bioassay results to affected employees and to Individual Radiation Exposure Records files.

The number of potential intakes, positive routine bioassay analyses, and positive wound counts in FY01 is based on historical data.

The bioassay program will utilize off-Site laboratories for analyses. The Analytical Laboratories (AL) are not budgeted here.

Breakdown of Historical Cost Data:

Item: Routine and Special Bioassay Sampling

Units: 1 lot

Unit Cost: 2,793 hours

\$5,232 Supplies

Labor: 2,793 hours

750: R100S [E050] 1700 hrs./yr.

Bioassay coordinator functions, tracks, trends samples and laboratory performance. Coordinates blind audit program. Reviews data packets and screens

WBS No: 1HAJ20
Activity ID: 1HAJ200001

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bioassay results.

750: R100S [P080] 463 hrs./yr.
Data review, investigation, reporting

750: R100S [P170] 630 hrs./yr.
Bioassay scheduling, administration, reporting

Non-Labor:
A5C: \$5,232
Supplies - bioassay sampling kits, cards \$1,774
Supplies - paper, envelopes, plastic bags \$1,169
Supplies - Kimwipes, misc. sampling supplies \$2,289

A5M: \$2,000
Travel to the Bioassay, Analytical, and Environmental Radiochemistry Conference in Seattle, WA. Based on \$300 registration, \$150/day per diem (7 days), and \$650 air fare. \$2,000

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	1,700.00	Hours
Factors	1700 hours							
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	463.00	Hours
Factors	463 hours							
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	630.00	Hours
Factors	630 hours							
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	5,430.82	Dollars
Factors	5232 dollars	1.038	use tax adjustment factor of 3.8%					
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	2,000.00	Dollars
Factors	2000 dollars							

Line Item MTNHIDN502 - In-Vivo Counting

BOE

Source of Data:

Item Desc: In-Vivo Counting

Line Item Scope
In-Vivo Counting is the direct measurement of the quantities of radioactive materials in the human body. At Rocky Flats, it consists of lung, other organ (liver, scull), or wound counting in specially designed low-background counting chambers, as well as screening wound counts in the decontamination facility. The In-Vivo Counting task is broken down into sub-tasks. The subtasks include identifying who requires counting, generating requests, tracking completion, performance of calibration and quality assurance activities, reviewing data, formulating conclusions, and reporting the data.

Routine lung counts are those counts performed on a periodic basis, and Special Lung Counts are those counts conducted as a result of incidents or as part of an investigation into a potential intake of radioactive materials. The time estimates required for Internal Dosimetry to perform each sub-task are based on experience and judgment. The number of lung counts based on current FY00 levels of approximately 3,200 Radiation Worker II-qualified employees. Annually there are also approximately 50 special lung counts. Since these are only a small percentage of the total counts and frequently displace scheduled counts, they are not budgeted separately. Due to workload limitations, only about 2,500 counts can be performed per year. This task provides lung count results to affected employees and to Individual Radiation Exposure Records files. There are also approximately 250 former employees recalled through the Health Effects Recall Program some of whom are lung and/or wound counted. However, this estimate does not include the 250 hours of projected funding from the Health Effects Group. The task also includes funding for a vendor-supplied maintenance contract on the lung counting equipment.

The wound count program is for people involved in potential intakes and for people with known or suspected wound depositions. The task entails the performance, analysis, review, quality assurance aspects and reporting of approximately 100 wound count results for employees who sustain injuries in Radiological Areas and 10 people with known wound depositions. There are two types of counts performed, screening and quantitative. This task provides wound count results to affected employees and to Individual Radiation Exposure History files. Radiological Safety Technical Supervisors may also perform screening wound counts after hours, but do not charge to this number. The task also includes funding for Health Physics Instrumentation (Alpha Group) services to maintain and calibrate the screening wound counters.

Non-labor dollar estimates are based on FY98 and FY99 actuals, or using vendor catalogs.

WBS No: 1HAJ20
Activity ID: 1HAJ200001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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Starts In FY *

Breakdown of Historical Cost Data:
Item: In-Vivo Counting
Units: 1 lot
Unit Cost: 3,727 hours
\$61,863 cost

Labor: 3,727 hours
750: K238S [P080] 925 hrs./yr.
Calibration, data review, investigation, reporting

750: R100S [P080] 462 hrs./yr.
Data review, investigation, reporting

750: R100S [P170] 2290 hrs./yr.
Scheduling, QA, counting, explanation of results

750: KH10H [T070] 50 hrs./yr.
Metrology support for calibration of sources

Non-Labor:
A5C: \$29,194
Supplies - germanium detector and wound counter repairs by vendor \$7,717
Supplies - liquid nitrogen supplies from an offsite vendor \$15,177
Supplies - paper clothes, booties, sticky mats \$5,725
Supplies - Mylar, cables, batteries, repair parts \$575

A5H: \$30,897
Alpha support for wound counter calibration and detector repair \$14,618
Canberra lung counter maintenance contract \$16,279

A5M: \$1,772
Travel to DOE Lung Count Conference. The amount is based on travel to Charleston, SC. Where the lung count conference was held in 1997. Travel is based on \$928 for airfare, hotel/per diem \$519.60 and \$325 car rental \$1,772

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	925.00	Hours
Factors 925 hours								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	462.00	Hours
Factors 462 hours								
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFF	R100S	RMRS Salaried	Linear	2 290.00	Hours
Factors 2290 hours								
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KH10H	EESH&Q Steelworkers	Linear	50.00	Hours
Factors 50 hours								
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	23.763.97	Dollars
Factors 22894 dollars 1.038 use tax adjustment factor of 3.8%								
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	24.999.82	Dollars
Factors 30897 dollars								
0.80913 [SYS 061400] .80704 - System								
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	1.772.00	Dollars
Factors 1772 dollars								

Line Item MTNHIDN503 - Intake & Dose Assessment

BOE

Source of Data:

WBS No: 1HAJ20
Activity ID: 1HAJ200001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Item Desc: Intake and Dose Assessment

Line Item Scope

The task provides intake and dose assessments for radiation workers involved in potential intake (PI) incidents using methodologies recommended by the International Commission on Radiological Protection in Publications 26 and 30. The program includes Internal Dosimetry costs for data review and analysis; computer modeling and analysis; data reporting; and health risk briefings. The task provides for dose assessment results to affected employees and to Individual Radiation Exposure History File. The task estimates are based on FY99 actuals and projections of the number of potential intakes and positive routine samples. The task is based on 220 PI cases, 100 of which will result in a dose assessment performed. It is not possible to accurately estimate the number of people that will be involved in potential intakes or have positive bioassay results. The task also provides support to other functional groups within Radiological Safety and to Radiation Workers on an as needed basis. Costs include Internal Dosimetry's time for answering questions, providing special assessments, evaluating workplace data, conducting one-on-one health risk briefings with employees with internal depositions. Hours are based on FY99 actuals and estimates based on current or planned activities.

Breakdown of Historical Cost Data:

Item: Intake and Dose Assessment

Units: 1 lot

Unit Cost: 1,412 hours

\$96,369 cost

Labor: 1,412 hours

750: K238S [P080] 925 hrs./yr.

Dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review

750: R100S [P080] 462 hrs./yr.

Dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review

750: R100S [P170] 25 hrs./yr.

Dose assessment support

Non-Labor:

A5H: \$96,369

RMRS Corp employee for dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review. Based on \$51.46 per/hr x 1850 hrs. \$95,201

Subcontract for independent review of one internal dose assessment case \$1,168

Unit Cost Adjustment Factor:

Revised Unit Cost:

Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	925.00	Hours
<i>Factors</i>	925 hours							
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	462.00	Hours
<i>Factors</i>	462 hours							
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	25.00	Hours
<i>Factors</i>	25 hours							
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	77.030.39	Dollars
<i>Factors</i>	1850 hours		51.46 dollars					
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	945.07	Dollars
<i>Factors</i>	1168 dollars							

0.80913 [SYS 061400] .80704 - System

0.80913 [SYS 061400] .80704 - System

Line Item MTNHIDN504 - Internal Dosimetry Program Admin

BOE

Source of Data:

Item Desc:

WBS No: 1HAJ20
Activity ID: 1HAJ200001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

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Line Item Scope
This task conducts the administrative aspects of a functional Internal Dosimetry program. The estimates are based on experience in FY00 and judgment. Included in this task are procedures maintenance, radioactive source inventory, property inventory, and secretarial and management support.

Breakdown of Historical Cost Data:
Item: Program management, oversight and administration
Units: 1 lot
Unit Cost: 4,400 hours
\$9,866 cost

Labor: 4,400 hours
750: K238S [G010] 616 hrs./yr.
Administrative support by Rad. Health Secretary

750: K238S [M020] 616 hrs./yr.
Management oversight by Rad. Health Manager

750: K238S [P080] 1850 hrs./yr.
Team lead review of nasal/mouth results, routine urine results, dose assessment reports. Policy, procedure, and technical basis development.

750: R100S [P080] 463 hrs./yr.
Training, procedure and technical basis development, staff meetings

750: R100S [P170] 755 hrs./yr.
Training, procedure development, staff meetings, source control, property management

750: R100S [T060] 100 hrs./yr.
RCT support to source inventory, shipping, etc.

Non-Labor:
A5C: \$9,866
Supplies - office equipment repair parts \$1,800
Supplies - computer/printer upgrades, specialized software \$4,995
Supplies - NCRP/ICRP, and misc. publications \$870
Supplies - shipping charges for DOELAP and DOE Library phantoms, detectors being returned to vendor \$500
Supplies - professional dues based on 3 HPS dues at \$75/yr and 3 ABHP maintenance fees at \$50/yr \$375
Supplies - office supplies, paper, toner, binders, logbooks, safety shoes, safety glasses, etc. \$1,326

Unit Cost Adjustment Factor:
Revised Unit Cost:

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	616.00	Hours
Factors	616 hours							
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	616.00	Hours
Factors	616 hours							
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	1,850.00	Hours
Factors	1850 hours							
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	463.00	Hours
Factors	463 hours							
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	755.00	Hours
Factors	755 hours							
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KH10H	EESH&Q Steelworkers	Linear	100.00	Hours
Factors	100 hours							
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	10,240.91	Dollars
Factors	1.038 use tax adjustment factor of 3.8%	9866	dollars					

Line Item MTNHIDS501B5 - Routine Whole Body Dosimetry

BOE BOE Type HC

WBS No: 1HAJ20
Activity ID: 1HAJ200001

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Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
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Source of Data:

Item Desc: Dosimetry Exchanges

Line Item Scope

The routine dosimetry task was broken down into sub-tasks required to complete the task. The time estimates required for External Dosimetry to perform each sub-task are based on experience and judgment gained in FY98 and FY99. No actual time studies were performed. Non-labor dollar estimates are based on FY98 and FY99 actuals, or using current vendor catalogs.

In FY 99, there were approximately 4300 radiation workers who exchanged dosimeters on a quarterly (some monthly) basis. The number of monitored individuals is similar thus far in FY00. This budget assumes there will be 4300 radiation workers in FY01. In addition, External Dosimetry anticipates providing 1000 Visitor dosimeters during FY01, based on the number of dosimeters issued from January 1999 to January 2000. Additional dosimeters are issued for special studies, multiple dosimeters, etc. The annual throughput expected in FY01 is 20,000 dosimeters handled per year (5,000 x 4 quarters = 20,000). Element Correction Factors (ECFs) are determined once/year for each TLD, and require additional processing.

Breakdown of Historical Cost Data:

Item: Whole body, extremity and area TLD exchanges.

Units: 1 lot

Unit Cost: 13,236 hours

\$329,953

Labor: 13,236 hours

750: R632S [M010] 1850 hrs./yr.

First Line Supervisor/Manager, Dose processing and review, Dosimeter investigations Environmental TLDs (processing, review and reporting) and Area monitoring TLDs (processing, review and reporting).

750: R632S [KH10H] 9,250 hrs.

To perform routine TLD exchanges based on FY99 experience, process routine TLD's, ECF the TLD population, Issue new and non-routine dosimetry from building 112, and process non-routine (monthly and terminating employees) on an as needed basis.

750: R632S [P080] 1776 hrs./yr.

Reviewing final dose processing results, set up of the dose reconstruction files, reader maintenance and calibrations, DOELAP preparation and testing, file maintenance, dose studies, dose investigations, and ECF generation.

751: R632S [M010] 60 hrs./yr.

Provides supervisory coverage and performs dose processing during the four quarterly exchanges, performed on off-shifts.

751: R632S [KH10H] 300 hrs./yr.

To perform four off-shift (AWS days) quarterly exchanges. Exchanges performed off-shifts since most dosimeters are on the storage board at that time, and to minimize impact on projects.

Non-Labor:

A5C: \$123,315

Replacement Panasonic TLDs (600 Panasonic 809 @ 69.50 ea. = \$41,700) \$41,700

Whole body TLD replacement holders (1000 @ \$45.13 ea. = \$45,130) \$45,130

Wrist dosimetry holder (500 @ \$8.97 ea. = \$4,485) \$4,485

Lab supplies - Computer/Printer upgrades, film, ID Cards, Laminate Coverings, paper, labels, printer ribbons, etc. \$32,000

A5H \$206,638

Stanford Dosimetry for technical and algorithm support \$37,500

Alpha group for the daily cleaning and minor maintenance of the Panasonic TLD readers

\$9,844

Consultant support for DOELAP testing and support. This includes modifications to the new RGSC software, pure field irradiation testing, and algorithm development/enhancement \$45,559

ECF irradiation's \$5,000

Maintenance/Service of the UPS system which supports the Panasonic TLD readers

\$5,000

Digital Equipment support for Computers and Printers \$2,985

Panasonic maintenance contract on three readers \$16,200

Panasonic maintenance contract on TLD badge exchanger \$6,750

Battelle irradiation contract - Calibration Services for the Panasonic readers \$50,000

Training contract for External Dosimetry \$10,000

WBS No: 1HAJ20
Activity ID: 1HAJ20001

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Activity Filter *

Starts In FY *

Antech Service Contract for the WE Irradiator \$9,800
RGSC External Dosimetry software maintenance \$8,000

A5M: \$4,441
Panasonic Conference: \$1,691
(for FY00 conference; Airfare \$484.00, Car rental \$205.00, Lodging \$835, and registration \$167)
External Dosimetry Training: \$2,750
(Plato Dosimetry Training Class (estimated airfare \$500, Car rental \$200, lodging \$850, and registration \$1,200)

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	9.250.00	Hours
Factors 9250 hrs								
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	1.850.00	Hours
Factors 1850 hours								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.776.00	Hours
Factors 1776 hours								
751	OVERTIME BASE & PRE.	L050	MISSION SUP SPEC I (CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	300.00	Hours
Factors 300 hours								
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	60.00	Hours
Factors 60 hours								
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	128.001.00	Dollars
Factors 1.038 use tax adjustment factor of 3.8% 123315 dollars								
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	167.197.90	Dollars
Factors 206638 dollars								
0.80913 [SYS 061400] .80704 - Svstem								
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	4.441.00	Dollars
Factors 4441 Dollars								

Line Item MTNHIDS503B6 - Nuclear Accident Dosimetry

BOE

BOE Type HC
Source of Data:
Item Desc: Nuclear Accident Dosimetry
Line Item Scope The nuclear accident dosimetry (NAD) system is maintained operational at all times. This task includes the time to maintain, operate, and calibrate the NAD equipment. Energy calibrations and equipment QA source checks are performed weekly. A complete system calibration is performed semi-annually.
Breakdown of Historical Cost Data: Item: Nuclear Accident Dosimetry Units: 1 lot Unit Cost: 150 hours \$6,555
Labor: 750: R632S [P080] 150 hours Weekly equipment calibration (52 wk. x 2 hr./wk) 104 hr./y Semi Annual calibration (2 cal x 23 hr./cal) 46 hr./y
Non-Labor: A5H: \$6,555 Cleaning, maintenance, calibrations and QC's on the Harshaw readers (Alpha) \$3,555 Nitrogen gas for the operation of the Harshaw Readers \$3,000

WBS No: 1HAJ20
Activity ID: 1HAJ200001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Request for additional detail should be made to Activity Manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	150.00	Hours

Factors 150 hours

A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	5,303.88	Dollars
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Factors 6555 Dollars

0.80913 [SYS 061400] .80704 - System

Line Item MTNHIDS504B7 - External Dose Reconstruction

BOE

BOE Type HC

Source of Data:

Item Desc: External Dosimetry Dose Reconstructions

Line Item Scope

Periodically, an employee's external dose cannot be determined through conventional methods. This may happen if the TLD fails, the reader malfunctions, or if the employee loses or damages the TLD. In this case, a dose reconstruction is necessary in order to determine a dose of record. The dose reconstruction process ranges from a simple one to a very complex reconstruction requiring several hours to complete. This task covers the costs necessary to perform the investigation and report generation required for dose reconstructions. It is anticipated that there will be 450 dose reconstructions that require a complete investigation in FY01, based on the actual number of dose reconstructions completed in FY99 and number of hours on average required per reconstruction.

Breakdown of Historical Cost Data:

Item: External Dosimetry Dose Reconstructions
Units: 1 lot
Unit Cost: 1700 hours

Labor:

750: R632S [P080] 1700 hrs.

Performance of Dose Reconstructions (450 x 3.78 hours each) = 1700 hr./yr.

Non-Labor:

None required

Request for additional detail should be made to Activity Manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1,700.00	Hours

Factors 1700 hours

Line Item MTNHIDS506B8 - External Dosimetry Program Admin

BOE

BOE Type HC

Source of Data:

Item Desc: External Dosimetry Program Admin

Line Item Scope

This task provides for the administrative functions for the department including: maintenance of Dosimetry historical data; procedures review and revision; property inventory; Radiological Records support and QA checks; training; maintenance of the readers, glow curve boxes, calibration, heating adjustments of the readers; contract administration; contamination surveys; and management and secretarial support.

Breakdown of Historical Cost Data:

WBS No: 1HAJ20
Activity ID: 1HAJ200001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Item: External Dosimetry Program Admin
Units: 1 lot
Unit Cost: 3,922 hours

Labor: 3,922 hours
750: K238S [M020] 616 hours.
Provides management support and overview.

750: K238S [G010] 616 hours.
Provides secretarial support.

750: R632S [E050] 150 hours.
Provides administrative functions and procedure review/revision.

750: R632s [P080] 2540 hours.
Provides other Admin/Professional actives, program management, property inventory, Annual report review, Annual report card reviews, Data entry reviews and general problem solving, maintenance support, program support, and training.

Non-Labor:
None required

Request for additional detail should be made to Activity manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	150.00	Hours
	Factors	150	hours						
	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	616.00	Hours
	Factors	616	hours						
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	616.00	Hours
	Factors	616	hours						
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	616.00	Hours
	Factors	616	hours						
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	972.00	Hours
	Factors	972	hours						
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	952.00	Hours
	Factors	952	hours						

Line Item MTNHIDU501C8 - Radiological Records Files Maintenance

BOE	BOE Type HC
	Source of Data: Line Item Scope The number of monitored radiation workers with radiation exposure files is based on FY00 levels of about 4,300. This budget assumes there will be no more than 4,300 radiation workers in FY01. Specific tasks include data entry, records filing, archiving and retrieval from the Federal Records Center. There are projected to be about 450 dose reconstructions in FY 01, which must be reviewed, tracked, and posted separate from other dosimetry data, and filed in individual's exposure history files. Visitor reports for monitored visitors must be generated after each visit to the Site. Breakdown of Historical Cost Data: Item: File Maintenance Units: 1 lot Unit Cost: 3,717 hours Labor: 750: R632S 3,700 hr. Based on 4,300 active radiation workers [P170] Previous exposure history program, archiving, retrieving records 1,850 hr.

WBS No: 1HAJ20
Activity ID: 1HAJ200001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

[G010] Dose Reconstructions 250 hr.
[G010] HIS-20 Data Entry 550 hr.
[G010] Exposure Records filing: 550 hr.
[G010] Visitor dosimetry program 250 hr.
[G010] HIS-20 Help desk suppor 250 hr.
751: R632S 17 hr. Based on 4,300 active radiation workers
[G010] Overtime support OT for archivin 17 hr./yr.
A55 - Records Center handling 40 boxes X 65.00

Non labor:
None required

Request for additional details should be made to Activity manager S. Baker or S. Pike
Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	1.850.00	Hours
Factors	1850	hours							
750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1.850.00	Hours
Factors	1850	hours							
751	OVERTIME BASE & PRE.		P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	17.00	Hours
Factors	17	hours							
A55	SOURCE ONE		0000	NONE	K238S	Radiation Protection	Linear	2.600.00	Dollars
Factors	40	BOXES	65	DOLLARS					

Line Item MTNHIDU502C9 - Annual Report to DOE

BOE

BOE Type HC

Source of Data:

Item Desc: Annual Report to DOE

Line Item Scope
An annual report of all occupational radiation exposure is required to be prepared and delivered to the DOE by March 31, 2001. The report is automatically generated from the Records computer system (HIS-20).

Specific tasks include; report generation, QC review for data quality to ensure results are generated as entered into the databases, QC review for format, demographic data manipulation (editing and verification), dose reconstruction data correction, and distribution of the report.

Breakdown of Historical Cost Data:
Item:
Units: 1 lot
Unit Cost: 686 hrs
Labor:
750: 618 hours
751: 68 hrs.

Non-labor:
None required

Request for additional detail should be made to Activity manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	618.00	Hours
Factors	618 hours							
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	68.00	Hours
Factors	68 hours							

WBS No: 1HAJ20
Activity ID: 1HAJ200001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Line Item MTNHIDU503C10 - Annual Exposure Report Cards to Individuals

BOE	BOE Type HC									
	Source of Data:									
	Item Desc: Annual Exposure Report Cards to Individuals									
	Line Item Scope									
	Annual Occupational Radiation Exposure Reports (report cards) are printed for all monitored employees for the previous calendar year's exposure. Duplicate report cards are printed to provide individuals personal copy and record file copy. The report cards are distributed through U.S. Mail. This budget assumes there will be no more than 4,300 radiation workers in FY01 requiring report cards.									
	Specific tasks are; data quality assurance verification performed on report cards to ensure doses reported match the Annual Report and the database, updating the mailing list, folding reports, inserting them into envelopes, addressing reports, and mailing them, and filing record file copy of the report card.									
	Breakdown of Historical Cost Data:									
	Item: Exposure Report Cards									
	Units: 1 lot									
	Unit Cost: 625 hrs									
Resources	Labor:									
	[750] 616 hrs									
	[751 9 hrs									
	Non-labor:									
	None required:									
	Request for additional detail should be made to Activity manager S. Baker of S. Pike									
	Unit Cost Adjustment Factor:									
	Revised Unit Cost:									
	Basis for Adjustment									

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	616.00	Hours
Factors 616 hours								
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	9.00	Hours
Factors 9 hours								

Line Item MTNHIDU504C11 - Other Required Reports

BOE	BOE Type HC									
	Source of Data:									
	Item Desc: Other Required Reports									
	Line Item Scope									
	Several other types of reports are required to be provided to individuals, Radiological Protection, DOE, or to line management. Some of the reports are routinely scheduled such as quarterly high-to-low exposure reports. Others are provided as requested such as Freedom of Information (FOIA) or legal requests. The number of reports requested and the time required to produce them is based on experience and assuming 4,300 radiation workers.									
	Employees may request copies of their radiation exposure files whenever they want. In addition, terminating employees, former employees or legal representation may request file copies. Historically, approximately 60 file copies are requested per year. These must be photocopied, assembled, inventoried, and issued. Computer generated summary reports are also provided to visitors or terminating employees who request them. This activity also supports requesting radiation dose history from former employers of new radiation workers, and providing exposure histories to other facilities when requested.									
	Dose reports organized from highest exposure to lowest exposure are provided to management and Radiological Control. These may be routine quarterly ALARA Reports (high-to-low) or non-routine ALARA reports. Routine reports must be generated, sorted and distributed. Non-routine reports may require sub-contractor time for programming support.									
	Breakdown of Historical Cost Data:									
	Item: Report preparation and distribution									
	Units: 1 lot									
	Unit Cost: 636 hrs									

WBS No: 1HAJ20
Activity ID: 1HAJ200001

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Starts In FY *

Labor:
[750]: 616 hrs
[751]: 20 hrs.
Non-labor:
None required

Request for additional detail should be made to Activity manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	616.00	Hours
Factors 616 hours									
Resources	751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	20.00	Hours
	Factors 20 hours								

Line Item MTNHIDU505C12 - Radiological Records Program Admin

BOE	BOE Type HC								
	Source of Data:								
	Item Desc: Radiological Records Program Admin								
	Line Item Scope								
	This task conducts the management and administrative aspects of a functional Radiological Records program. Specific tasks include setting daily assignments, monitoring performance, conducting performance reviews, budget, property management, staff meetings and communications, customer interface, and administrative functions. The estimates are based on experience in FY99 and judgment.								
	Breakdown of Historical Cost Data:								
	Item: Radiological Records Program Admin								
	Units: 1 lot								
	Unit Cost: 3122 hrs, A5C supplies \$14,165								
	Labor:								

[750]: 3,102 hours
[751]: 20 hours
Non-labor:
[A5C]: \$13,445 X 1.038 sales tax
Supplies (paper, envelopes, files, fire kings, toner, folders, rubber stamps, labels, etc.)

Request for additional detail should be made to Activity manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	616.00	Hours
Factors 616 hours									
Resources	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	616.00	Hours
	Factors 616 hours								
Resources	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.850.00	Hours
	Factors 1850 Hours								
Resources	751	OVERTIME BASE & PRE.	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	20.00	Hours
	Factors 20 hours								
Resources	A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	14.703.27	Dollars
	Factors 1.038 use tax adder 14165 dollars								

Line Item SYS - Contingency And Escalation

BOE

WBS No: 1HAJ20
Activity ID: 1HAJ200001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	74.165.52	Dollars
Factors		74165.5 Dollars							
ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	48.930.55	Dollars
Factors		48930.6 Dollars							

Activity ID: 1HAJ200002 Description: Radiological Health FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
HIS-20C13	HIS-20	1.00	each	HC	1.234	1.234	40.771	169.019	0	209.791	14.392	224.183
MTNHIDN501	Bioassav Sampling	1.00	ea	HC	2.793	2.793	82.074	7.431	0	89.505	28.972	118.478
MTNHIDN502	In-Vivo Counting	1.00	ea	HC	3.727	3.727	107.004	50.536	0	157.539	37.772	195.312
MTNHIDN503	Intake & Dose Assessment	1.00	ea	HC	1.412	1.412	46.482	77.975	0	124.458	16.408	140.866
MTNHIDN504	Internal Dosimetry Program Admin	1.00	ea	HC	4.400	4.400	141.428	10.241	0	151.669	49.924	201.593
MTNHIDS501B9	Routine Whole Body Dosimetry	1.00	each	HC	13.236	13.236	290.666	299.640	0	590.306	102.605	692.911
MTNHIDS503B10	Nuclear Accident Dosimetry	1.00	each	HC	150	150	4.956	5.304	0	10.260	1.749	12.009
MTNHIDS504B11	External Dose Reconstruction	1.00	each	HC	1.700	1.700	56.168	0	0	56.168	19.827	75.995
MTNHIDS506B12	External Dosimetry Program Admin	1.00	each	HC	3.922	3.922	131.513	0	0	131.513	46.424	177.937
MTNHIDU501C14	Radiological Records Files Maintenance	1.00	ea	HC	3.717	3.717	79.762	2.600	0	82.362	28.156	110.517
MTNHIDU502C15	Annual Report to DOE	1.00	ea	HC	686	686	18.241	0	0	18.241	6.439	24.680
MTNHIDU503C16	Annual Exposure Report Cards to Individuals	1.00	ea	HC	625	625	16.426	0	0	16.426	5.799	22.225
MTNHIDU504C17	Other Required Reports	1.00	ea	HC	636	636	16.755	0	0	16.755	5.914	22.669
MTNHIDU505C18	Radiological Records Program Admin	1.00	each	HC	3.102	3.102	104.779	14.703	0	119.482	36.987	156.469
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	324.371	324.371	0	324.371
Total for Activity 1HAJ200002:						41.340	1,137.025	637.449	324.371	2,098.846	401.370	2,500.216

Line Item HIS-20C13 - HIS-20

BOE	<p>BOE Type HC</p> <p>Source of Data:</p> <p>Item Desc: HIS-20 System Support</p> <p>Line Item Scope</p> <p>All dose information is stored in an electronic format as well as hard copy. The electronic format allows for reporting, tracking and trending of dose information, and provides a back-up for the hard copy information. The electronic databases require programming support from sub-contractors to maintain and improve the system. This activity provides for programming support based on experience gained in FY99 and anticipated needs for the HIS-20 database.</p> <p>Breakdown of Historical Cost Data:</p> <p>Item: HIS-20 Support</p> <p>Units: 1 lot</p> <p>Unit Cost: 1,234 hours</p> <p>\$203,039 in ODCs: \$197,315 in subcontracted services and \$5,724 training/travel.</p> <p>Labor:</p> <p>750: R632S [P080] 1224 hrs./yr.</p> <p>Provides HIS-20 system manager and computer security officer functions. Provides database administrator support functions including development of specialized queries, correcting data problems, providing support for database enhancements.</p> <p>Non-labor:</p> <p>A5H: DynCorp I&E software Engineer 4 Database support for database development, development of reports, special reports, database & software modifications (\$113,120K).</p> <p>A5H: DynCorp I&E database administrator support for database management, and maintenance (\$32,500K).</p> <p>A5H: Canberra support for software phone support based on FY99 actuals (\$37,695) and software program enhancements anticipated (\$14,000).</p> <p>A5M: Travel for 1 to the HIS-20 Users Group Meeting in Meridan, CT per quote from RMRS Corporate travel on 3/1/99 (airfare \$511, hotel/per diem \$540, rental car \$260)</p> <p>A5M: Oracle database training for HIS-20 (2 local classes) based on price sheet from training class (\$4,413).</p> <p>Unit Cost Adjustment Factor:</p> <p>Revised Unit Cost:</p> <p>Basis for Adjustment:</p>
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WBS No: 1HAJ20
Activity ID: 1HAJ200002

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.234.00	Hours
Factors 1234 hours								
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	29.937.97	Dollars
Factors 37000 dollars								
0.80913 [SYS 061400] .80704 - System								
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	30.500.31	Dollars
Factors 37695 dollars								
0.80913 [SYS 061400] .80704 - System								
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	11.327.88	Dollars
Factors 14000 dollars								
0.80913 [SYS 061400] .80704 - System								
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	91.529.27	Dollars
Factors 113120 dollars								
0.80913 [SYS 061400] .80704 - System								
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	S100S	SSOC Salaried	Linear	4.413.00	Dollars
Factors 4413 dollars								
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	S100S	SSOC Salaried	Linear	1.311.00	Dollars
Factors 1311 dollars								

Line Item MTNHIDN501 - Bioassay Sampling

BOE

Source of Data:

Item Desc: Bioassay Sampling

Line Item Scope
Bioassay is the determination of the quantities of radioactive materials in the bodies of workers by the measurement of these materials in the excreta (urine or feces). The bioassay task is broken down into sub-tasks. Subtasks include identifying who requires sampling, generating requests, tracking submission, tracking laboratory performance, reviewing data, formulating conclusions, and reporting the data. Routine Bioassay measurements are those samples collected on a periodic basis, and Special Bioassay measurements are those samples collected as a result of incidents or as part of an investigation into a potential intake of radioactive materials. The time estimates required for Internal Dosimetry to perform each sub-task are based on experience and judgment.

The number of analyses for the routine bioassay program is based on current FY00 levels of approximately 3,200 Radiation Worker II-qualified employees. It is anticipated that there will be 2,600 of these radiation workers in FY01 who will also have a current respirator fit. The FY01 budget request assumes that only this later population will be urine sampled for plutonium (2,600 analyses). In addition, approximately 160 of these workers are also designated for participation in the Uranium Workgroup Monitoring Program and will be sampled for uranium. For the rest of the Site, bioassay requirements for uranium and tritium are to be determined on a job-specific basis and are in addition to the annual plutonium requirement. It is anticipated that 50 such analyses will be required. It is also assumed that 90 analyses will be necessary to monitor workers with old intakes for purposes of possible re-evaluation. In addition, approximately 250 special fecal and 100 special urine samples will be required to support potential intake investigations. Ten percent of the analyses will require validation for quality control. This task provides bioassay results to affected employees and to Individual Radiation Exposure Records files.

The number of potential intakes, positive routine bioassay analyses, and positive wound counts in FY01 is based on historical data.

The bioassay program will utilize off-Site laboratories for analyses. The Analytical Laboratories (AL) are not budgeted here.

Breakdown of Historical Cost Data:
Item: Routine and Special Bioassay Sampling
Units: 1 lot
Unit Cost: 2,793 hours
\$5,232 Supplies

Labor: 2,793 hours
750: R100S [E050] 1700 hrs./yr.
Bioassay coordinator functions, tracks, trends samples and laboratory performance. Coordinates blind audit program. Reviews data packets and screens bioassay results.

750: R100S [P080] 463 hrs./yr.
Data review, investigation, reporting

WBS No: 1HAJ20
Activity ID: 1HAJ200002

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Activity Filter *

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750: R100S [P170] 630 hrs./yr.
Bioassay scheduling, administration, reporting

Non-Labor:
A5C: \$5,232
Supplies - bioassay sampling kits, cards \$1,774
Supplies - paper, envelopes, plastic bags \$1,169
Supplies - Kimwipes, misc. sampling supplies \$2,289

A5M: \$2,000
Travel to the Bioassay, Analytical, and Environmental Radiochemistry Conference in Seattle, WA. Based on \$300 registration, \$150/day per diem (7 days), and \$650 air fare. \$2,000

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	1,700.00	Hours
<i>Factors</i> 1700 hours								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	463.00	Hours
<i>Factors</i> 463 hours								
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	630.00	Hours
<i>Factors</i> 630 hours								
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	5,430.82	Dollars
<i>Factors</i> 5232 dollars 1.038 use tax adjustment factor of 3.8%								
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	2,000.00	Dollars
<i>Factors</i> 2000 dollars								

Line Item MTNHIDN502 - In-Vivo Counting

BOE

Source of Data:

Item Desc: In-Vivo Counting

Line Item Scope
In-Vivo Counting is the direct measurement of the quantities of radioactive materials in the human body. At Rocky Flats, it consists of lung, other organ (liver, scull), or wound counting in specially designed low-background counting chambers, as well as screening wound counts in the decontamination facility. The In-Vivo Counting task is broken down into sub-tasks. The subtasks include identifying who requires counting, generating requests, tracking completion, performance of calibration and quality assurance activities, reviewing data, formulating conclusions, and reporting the data.

Routine lung counts are those counts performed on a periodic basis, and Special Lung Counts are those counts conducted as a result of incidents or as part of an investigation into a potential intake of radioactive materials. The time estimates required for Internal Dosimetry to perform each sub-task are based on experience and judgment. The number of lung counts based on current FY00 levels of approximately 3,200 Radiation Worker II-qualified employees. Annually there are also approximately 50 special lung counts. Since these are only a small percentage of the total counts and frequently displace scheduled counts, they are not budgeted separately. Due to workload limitations, only about 2,500 counts can be performed per year. This task provides lung count results to affected employees and to Individual Radiation Exposure Records files. There are also approximately 250 former employees recalled through the Health Effects Recall Program some of whom are lung and/or wound counted. However, this estimate does not include the 250 hours of projected funding from the Health Effects Group. The task also includes funding for a vendor-supplied maintenance contract on the lung counting equipment.

The wound count program is for people involved in potential intakes and for people with known or suspected wound depositions. The task entails the performance, analysis, review, quality assurance aspects and reporting of approximately 100 wound count results for employees who sustain injuries in Radiological Areas and 10 people with known wound depositions. There are two types of counts performed, screening and quantitative. This task provides wound count results to affected employees and to Individual Radiation Exposure History files. Radiological Safety Technical Supervisors may also perform screening wound counts after hours, but do not charge to this number. The task also includes funding for Health Physics Instrumentation (Alpha Group) services to maintain and calibrate the screening wound counters.

Non-labor dollar estimates are based on FY98 and FY99 actuals, or using vendor catalogs.

Breakdown of Historical Cost Data:
Item: In-Vivo Counting
Units: 1 lot

WBS No: 1HAJ20
Activity ID: 1HAJ20002

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Project
WBS Filter
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1HAJ
*

Starts In FY *

Unit Cost: 3,727 hours
\$61,863 cost

Labor: 3,727 hours
750: K238S [P080] 925 hrs./yr.
Calibration, data review, investigation, reporting

750: R100S [P080] 462 hrs./yr.
Data review, investigation, reporting

750: R100S [P170] 2290 hrs./yr.
Scheduling, QA, counting, explanation of results

750: KH10H [T070] 50 hrs./yr.
Metrology support for calibration of sources

Non-Labor:
A5C: \$29,194
Supplies - germanium detector and wound counter repairs by vendor \$7,717
Supplies - liquid nitrogen supplies from an offsite vendor \$15,177
Supplies - paper clothes, booties, sticky mats \$5,725
Supplies - Mylar, cables, batteries, repair parts \$575

A5H: \$30,897
Alpha support for wound counter calibration and detector repair \$14,618
Canberra lung counter maintenance contract \$16,279

A5M: \$1,772
Travel to DOE Lung Count Conference. The amount is based on travel to Charleston, SC. Where the lung count conference was held in 1997. Travel is based on \$928 for airfare, hotel/per diem \$519.60 and \$325 car rental \$1,772

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	925.00	Hours
Factors 925 hours								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	462.00	Hours
Factors 462 hours								
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	2,290.00	Hours
Factors 2290 hours								
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KH10H	EESH&Q Steelworkers	Linear	50.00	Hours
Factors 50 hours								
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	23,763.97	Dollars
Factors 22894 dollars		1.038 use tax adjustment factor of 3.8%						
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	24,999.82	Dollars
Factors 30897 dollars								
0.80913 [SYS 061400] .80704 - System								
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	1,772.00	Dollars
Factors 1772 dollars								

Line Item MTNHIDN503 - Intake & Dose Assessment

BOE

Source of Data:

Item Desc: Intake and Dose Assessment

Line Item Scope
The task provides intake and dose assessments for radiation workers involved in potential intake (PI) incidents using methodologies recommended by the

WBS No: 1HAJ20
Activity ID: 1HAJ200002

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Activity Filter *

Starts In FY *

International Commission on Radiological Protection in Publications 26 and 30. The program includes Internal Dosimetry costs for data review and analysis; computer modeling and analysis; data reporting; and health risk briefings. The task provides for dose assessment results to affected employees and to Individual Radiation Exposure History File. The task estimates are based on FY99 actuals and projections of the number of potential intakes and positive routine samples. The task is based on 220 PI cases, 100 of which will result in a dose assessment performed. It is not possible to accurately estimate the number of people that will be involved in potential intakes or have positive bioassay results. The task also provides support to other functional groups within Radiological Safety and to Radiation Workers on an as needed basis. Costs include Internal Dosimetry's time for answering questions, providing special assessments, evaluating workplace data, conducting one-on-one health risk briefings with employees with internal depositions. Hours are based on FY99 actuals and estimates based on current or planned activities.

Breakdown of Historical Cost Data:

Item: Intake and Dose Assessment

Units: 1 lot

Unit Cost: 1,412 hours

\$96,369 cost

Labor: 1,412 hours

750: K238S [P080] 925 hrs./yr.

Dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review

750: R100S [P080] 462 hrs./yr.

Dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review

750: R100S [P170] 25 hrs./yr.

Dose assessment support

Non-Labor:

A5H: \$ 96,369

RMRS Corp employee for dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review. Based on \$51.46 per/hr x 1850 hrs. \$95,201

Subcontract for independent review of one internal dose assessment case \$1,168

Unit Cost Adjustment Factor:

Revised Unit Cost:

Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	925.00	Hours
Factors	925 hours							
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	462.00	Hours
Factors	462 hours							
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	25.00	Hours
Factors	25 hours							
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	77.030.39	Dollars
Factors	1850 hours		51.46 dollars					
						0.80913 [SYS 061400] .80704 - System		
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	945.07	Dollars
Factors	1168 dollars							

0.80913 [SYS 061400] .80704 - System

Line Item MTNHIDN504 - Internal Dosimetry Program Admin

BOE

Source of Data:

Item Desc:

Line Item Scope

This task conducts the administrative aspects of a functional Internal Dosimetry program. The estimates are based on experience in FY00 and judgment. Included in this task are procedures maintenance, radioactive source inventory, property inventory, and secretarial and management support.

WBS No: 1HAJ20
Activity ID: 1HAJ200002

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Breakdown of Historical Cost Data:
Item: Program management, oversight and administration
Units: 1 lot
Unit Cost: 4,400 hours
\$9,866 cost

Labor: 4,400 hours
750: K238S [G010] 616 hrs./yr.
Administrative support by Rad. Health Secretary

750: K238S [M020] 616 hrs./yr.
Management oversight by Rad. Health Manager

750: K238S [P080] 1850 hrs./yr.
Team lead review of nasal/mouth results, routine urine results, dose assessment reports. Policy, procedure, and technical basis development.

750: R100S [P080] 463 hrs./yr.
Training, procedure and technical basis development, staff meetings

750: R100S [P170] 755 hrs./yr.
Training, procedure development, staff meetings, source control, property management

750: R100S [T060] 100 hrs./yr.
RCT support to source inventory, shipping, etc.

Non-Labor:
A5C: \$9,866
Supplies - office equipment repair parts \$1,800
Supplies - computer/printer upgrades, specialized software \$4,995
Supplies - NCRP/ICRP, and misc. publications \$870
Supplies - shipping charges for DOE LAP and DOE Library phantoms, detectors being returned to vendor \$500
Supplies - professional dues based on 3 HPS dues at \$75/yr and 3 ABHP maintenance fees at \$50/yr \$375
Supplies - office supplies, paper, toner, binders, logbooks, safety shoes, safety glasses, etc. \$1,326

Unit Cost Adjustment Factor:
Revised Unit Cost:

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	616.00	Hours
Factors 616 hours								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	616.00	Hours
Factors 616 hours								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	1,850.00	Hours
Factors 1850 hours								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	463.00	Hours
Factors 463 hours								
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	755.00	Hours
Factors 755 hours								
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KH10H	EESH&Q Steelworkers	Linear	100.00	Hours
Factors 100 hours								
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	10,240.91	Dollars
Factors 1.038 use tax adjustment factor of 3.8%		9866	dollars					

Line Item MTNHIDS501B9 - Routine Whole Body Dosimetry

BOE

BOE Type HC
Source of Data:
Item Desc: Dosimetry Exchanges

WBS No: 1HAJ20
Activity ID: 1HAJ200002

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Project Baseline Devl
WBS Filter 1HAJ
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Starts In FY *

Line Item Scope

The routine dosimetry task was broken down into sub-tasks required to complete the task. The time estimates required for External Dosimetry to perform each sub-task are based on experience and judgment gained in FY98 and FY99. No actual time studies were performed. Non-labor dollar estimates are based on FY98 and FY99 actuals, or using current vendor catalogs.

In FY 99, there were approximately 4300 radiation workers who exchanged dosimeters on a quarterly (some monthly) basis. The number of monitored individuals is similar thus far in FY00. This budget assumes there will be 4300 radiation workers in FY01. In addition, External Dosimetry anticipates providing 1000 Visitor dosimeters during FY01, based on the number of dosimeters issued from January 1999 to January 2000. Additional dosimeters are issued for special studies, multiple dosimeters, etc. The annual throughput expected in FY01 is 20,000 dosimeters handled per year (5,000 x 4 quarters = 20,000). Element Correction Factors (ECFs) are determined once/year for each TLD, and require additional processing.

Breakdown of Historical Cost Data:

Item: Whole body, extremity and area TLD exchanges.

Units: 1 lot

Unit Cost: 13,236 hours

\$329,953

Labor: 13,236 hours

750: R632S [M010] 1850 hrs./yr.

First Line Supervisor/Manager, Dose processing and review, Dosimeter investigations Environmental TLDs (processing, review and reporting) and Area monitoring TLDs (processing, review and reporting).

750: R632S [KH10H] 9,250 hrs.

To perform routine TLD exchanges based on FY99 experience, process routine TLD's, ECF the TLD population, Issue new and non-routine dosimetry from building 112, and process non-routine (monthly and terminating employees) on an as needed basis.

750: R632S [P080] 1776 hrs./yr.

Reviewing final dose processing results, set up of the dose reconstruction files, reader maintenance and calibrations, DOELAP preparation and testing, file maintenance, dose studies, dose investigations, and ECF generation.

751: R632S [M010] 60 hrs./yr.

Provides supervisory coverage and performs dose processing during the four quarterly exchanges, performed on off-shifts.

751: R632S [KH10H] 300 hrs./yr.

To perform four off-shift (AWS days) quarterly exchanges. Exchanges performed off-shifts since most dosimeters are on the storage board at that time, and to minimize impact on projects.

Non-Labor:

A5C: \$123,315

Replacement Panasonic TLDs (600 Panasonic 809 @ 69.50 ea. = \$41,700) \$41,700

Whole body TLD replacement holders (1000 @ \$45.13 ea. = \$45,130) \$45,130

Wrist dosimetry holder (500 @ \$8.97 ea. = \$4,485) \$4,485

Lab supplies - Computer/Printer upgrades, film, ID Cards, Laminate Coverings, paper, labels, printer ribbons, etc. \$32,000

A5H \$206,638

Stanford Dosimetry for technical and algorithm support \$37,500

Alpha group for the daily cleaning and minor maintenance of the Panasonic TLD readers

\$9,844

Consultant support for DOELAP testing and support. This includes modifications to the new RGSC software, pure field irradiation testing, and algorithm development/enhancement \$45,559

ECF irradiation's \$5,000

Maintenance/Service of the UPS system which supports the Panasonic TLD readers

\$5,000

Digital Equipment support for Computers and Printers \$2,985

Panasonic maintenance contract on three readers \$16,200

Panasonic maintenance contract on TLD badge exchanger \$6,750

Battelle irradiation contract - Calibration Services for the Panasonic readers \$50,000

Training contract for External Dosimetry \$10,000

Antech Service Contract for the WE Irradiator \$9,800

RGSC External Dosimetry software maintenance \$8,000

A5M: \$4,441

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Activity ID: 1HAJ200002

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Panasonic Conference: \$1,691
(for FY00 conference; Airfare \$484.00, Car rental \$205.00, Lodging \$835, and registration \$167)
External Dosimetry Training: \$2,750
(Plato Dosimetry Training Class (estimated airfare \$500, Car rental \$200, lodging \$850, and registration \$1,200)

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	9.250.00	Hours
Factors 9250 hrs								
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	1.850.00	Hours
Factors 1850 hours								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.776.00	Hours
Factors 1776 hours								
751	OVERTIME BASE & PRE.	L050	MISSION SUP SPEC I (CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	300.00	Hours
Factors 300 hours								
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	60.00	Hours
Factors 60 hours								
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	128.001.00	Dollars
Factors 1.038 use tax adjustment factor of 3.8% 123315 dollars								
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	167.197.90	Dollars
Factors 206638 dollars								
0.80913 [SYS 061400] .80704 - System								
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	4.441.00	Dollars
Factors 4441 Dollars								

Line Item MTNHIDS503B10 - Nuclear Accident Dosimetry

BOE

BOE Type HC

Source of Data:

Item Desc: Nuclear Accident Dosimetry

Line Item Scope
The nuclear accident dosimetry (NAD) system is maintained operational at all times. This task includes the time to maintain, operate, and calibrate the NAD equipment. Energy calibrations and equipment QA source checks are performed weekly. A complete system calibration is performed semi-annually.

Breakdown of Historical Cost Data:
Item: Nuclear Accident Dosimetry
Units: 1 lot
Unit Cost: 150 hours
\$6,555

Labor:
750: R632S [P080] 150 hours
Weekly equipment calibration (52 wk. x 2 hr./wk) 104 hr./y
Semi Annual calibration (2 cal x 23 hr./cal) 46 hr./y

Non-Labor:
A5H: \$6,555
Cleaning, maintenance, calibrations and QC's on the Harshaw readers (Alpha) \$3,555
Nitrogen gas for the operation of the Harshaw Readers \$3,000

Request for additional detail should be made to Activity Manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:

WBS No: 1HAJ20
Activity ID: 1HAJ200002

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Project Baseline Devl
WBS Filter 1HAJ
Activity Filter * Starts In FY *

Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	150.00	Hours
	Factors 150 hours								
	A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	5,303.88	Dollars
	Factors 6555 Dollars								

0.80913 [SYS 061400] .80704 - System

Line Item MTNHIDS504B11 - External Dose Reconstruction

BOE	BOE Type HC									
	Source of Data:									
	Item Desc: External Dosimetry Dose Reconstructions									
	Line Item Scope									
	Periodically, an employee's external dose cannot be determined through conventional methods. This may happen if the TLD fails, the reader malfunctions, or if the employee loses or damages the TLD. In this case, a dose reconstruction is necessary in order to determine a dose of record. The dose reconstruction process ranges from a simple one to a very complex reconstruction requiring several hours to complete. This task covers the costs necessary to perform the investigation and report generation required for dose reconstructions. It is anticipated that there will be 450 dose reconstructions that require a complete investigation in FY01, based on the actual number of dose reconstructions completed in FY99 and number of hours on average required per reconstruction.									
	Breakdown of Historical Cost Data:									
	Item: External Dosimetry Dose Reconstructions									
	Units: 1 lot									
	Unit Cost: 1700 hours									
	Labor:									
	750: R632S [P080] 1700 hrs.									
	Performance of Dose Reconstructions (450 x 3.78 hours each) = 1700 hr./yr.									
	Non-Labor:									
	None required									
	Request for additional detail should be made to Activity Manager S. Baker or S. Pike									
	Unit Cost Adjustment Factor:									
	Revised Unit Cost:									
Basis for Adjustment:										

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1,700.00	Hours
Factors 1700 hours									

Line Item MTNHIDS506B12 - External Dosimetry Program Admin

BOE	BOE Type HC									
	Source of Data:									
	Item Desc: External Dosimetry Program Admin									
	Line Item Scope									
	This task provides for the administrative functions for the department including: maintenance of Dosimetry historical data; procedures review and revision; property inventory; Radiological Records support and QA checks; training; maintenance of the readers, glow curve boxes, calibration, heating adjustments of the readers; contract administration; contamination surveys; and management and secretarial support.									
	Breakdown of Historical Cost Data:									
	Item: External Dosimetry Program Admin									
	Units: 1 lot									
	Unit Cost: 3,922 hours									

WBS No: 1HAJ20
Activity ID: 1HAJ200002

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*Starts In FY **

Labor: 3,922 hours
750: K238S [M020] 616 hours.
Provides management support and overview.

750: K238S [G010] 616 hours.
Provides secretarial support.

750: R632S [E050] 150 hours.
Provides administrative functions and procedure review/revision.

750: R632s [P080] 2540 hours.
Provides other Admin/Professional actives, program management, property inventory, Annual report review, Annual report card reviews, Data entry reviews and general problem solving, maintenance support, program support, and training.

Non-Labor:
None required

Request for additional detail should be made to Activity manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	150.00	Hours
<i>Factors</i> 150 hours								
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	616.00	Hours
<i>Factors</i> 616 hours								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	616.00	Hours
<i>Factors</i> 616 hours								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	616.00	Hours
<i>Factors</i> 616 hours								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	972.00	Hours
<i>Factors</i> 972 hours								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	952.00	Hours
<i>Factors</i> 952 hours								

Line Item MTNHIDU501C14 - Radiological Records Files Maintenance

BOE

BOE Type HC

Source of Data:

Line Item Scope
The number of monitored radiation workers with radiation exposure files is based on FY00 levels of about 4,300. This budget assumes there will be no more than 4,300 radiation workers in FY01.

Specific tasks include data entry, records filing, archiving and retrieval from the Federal Records Center. There are projected to be about 450 dose reconstructions in FY 01, which must be reviewed, tracked, and posted separate from other dosimetry data, and filed in individual's exposure history files. Visitor reports for monitored visitors must be generated after each visit to the Site.

Breakdown of Historical Cost Data:
Item: File Maintenance
Units: 1 lot
Unit Cost: 3,717 hours

Labor:
750: R632S 3,700 hr. Based on 4,300 active radiation workers
[P170] Previous exposure history program, archiving, retrieving records 1,850 hr.
[G010] Dose Reconstructions 250 hr.
[G010] HIS-20 Data Entry 550 hr.
[G010] Exposure Records filing: 550 hr.
[G010] Visitor dosimetry program 250 hr.

WBS No: 1HAJ20
Activity ID: 1HAJ200002

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[G010] HIS-20 Help desk suppor 250 hr.
751: R632S 17 hr. Based on 4,300 active radiation workers
[G010] Overtime support OT for archivin 17 hr./yr.
A55 - Records Center handling 40 boxes X 65.00

Non labor:
None required

Request for additional details should be made to Activity manager S. Baker or S. Pike
Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources	Cost Element			Skill		Department		Curve	Quantity	Units	
	750	STRAIGHT TIME BASE		G010	ADMINISTRATIVE ASSISTANTS		R100S	RMRS Salaried	Linear	1.850.00	Hours
	Factors		1850	hours							
	750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE		R100S	RMRS Salaried	Linear	1.850.00	Hours
	Factors		1850	hours							
	751	OVERTIME BASE & PRE.		P170	OTHER ADMINISTRATIVE & PROFE		R100S	RMRS Salaried	Linear	17.00	Hours
	Factors		17	hours							
	A55	SOURCE ONE		0000	NONE		K238S	Radiation Protection	Linear	2.600.00	Dollars
	Factors		40	BOXES		65	DOLLARS				

Line Item MTNHIDU502C15 - Annual Report to DOE

BOE	BOE Type HC Source of Data: Item Desc: Annual Report to DOE Line Item Scope An annual report of all occupational radiation exposure is required to be prepared and delivered to the DOE by March 31, 2001. The report is automatically generated from the Records computer system (HIS-20). Specific tasks include; report generation, QC review for data quality to ensure results are generated as entered into the databases, QC review for format, demographic data manipulation (editing and verification), dose reconstruction data correction, and distribution of the report. Breakdown of Historical Cost Data: Item: Units: 1 lot Unit Cost: 686 hrs Labor: 750: 618 hours 751: 68 hrs. Non-labor: None required Request for additional detail should be made to Activity manager S. Baker or S. Pike Unit Cost Adjustment Factor: Revised Unit Cost: Basis for Adjustment
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	618.00	Hours
	Factors 618 hours								
	751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	68.00	Hours
	Factors 68 hours								

Line Item MTNHIDU503C16 - Annual Exposure Report Cards to Individuals

BOE	BOE Type HC
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WBS No: 1HAJ20
Activity ID: 1HAJ200002

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Source of Data:

Item Desc: Annual Exposure Report Cards to Individuals

Line Item Scope

Annual Occupational Radiation Exposure Reports (report cards) are printed for all monitored employees for the previous calendar year's exposure. Duplicate report cards are printed to provide individuals personal copy and record file copy. The report cards are distributed through U.S. Mail. This budget assumes there will be no more than 4,300 radiation workers in FY01 requiring report cards.

Specific tasks are; data quality assurance verification performed on report cards to ensure doses reported match the Annual Report and the database, updating the mailing list, folding reports, inserting them into envelopes, addressing reports, and mailing them, and filing record file copy of the report card.

Breakdown of Historical Cost Data:

Item: Exposure Report Cards

Units: 1 lot

Unit Cost: 625 hrs

Labor:

[750] 616 hrs

[751] 9 hrs

Non-labor:

None required:

Request for additional detail should be made to Activity manager S. Baker of S. Pike

Unit Cost Adjustment Factor:

Revised Unit Cost:

Basis for Adjustment

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	616.00	Hours
Factors 616 hours								
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	9.00	Hours
Factors 9 hours								

Line Item MTNHIDU504C17 - Other Required Reports

BOE

BOE Type HC

Source of Data:

Item Desc: Other Required Reports

Line Item Scope

Several other types of reports are required to be provided to individuals, Radiological Protection, DOE, or to line management. Some of the reports are routinely scheduled such as quarterly high-to-low exposure reports. Others are provided as requested such as Freedom of Information (FOIA) or legal requests. The number of reports requested and the time required to produce them is based on experience and assuming 4,300 radiation workers.

Employees may request copies of their radiation exposure files whenever they want. In addition, terminating employees, former employees or legal representation may request file copies. Historically, approximately 60 file copies are requested per year. These must be photocopied, assembled, inventoried, and issued. Computer generated summary reports are also provided to visitors or terminating employees who request them. This activity also supports requesting radiation dose history from former employers of new radiation workers, and providing exposure histories to other facilities when requested.

Dose reports organized from highest exposure to lowest exposure are provided to management and Radiological Control. These may be routine quarterly ALARA Reports (high-to-low) or non-routine ALARA reports. Routine reports must be generated, sorted and distributed. Non-routine reports may require sub-contractor time for programming support.

Breakdown of Historical Cost Data:

Item: Report preparation and distribution

Units: 1 lot

Unit Cost: 636 hrs

Labor:

[750]: 616 hrs

[751]: 20 hrs.

WBS No: 1HAJ20
Activity ID: 1HAJ200002

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Non-labor:
None required

Request for additional detail should be made to Activity manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear 616.00 Hours
Factors		616 hours					
751		OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear 20.00 Hours
Factors		20 hours					

Line Item MTNHIDU505C18 - Radiological Records Program Admin

BOE

BOE Type HC

Source of Data:

Item Desc: Radiological Records Program Admin

Line Item Scope
This task conducts the management and administrative aspects of a functional Radiological Records program. Specific tasks include setting daily assignments, monitoring performance, conducting performance reviews, budget, property management, staff meetings and communications, customer interface, and administrative functions. The estimates are based on experience in FY99 and judgment.

Breakdown of Historical Cost Data:
Item: Radiological Records Program Admin
Units: 1 lot
Unit Cost: 3122 hrs, A5C supplies \$14,165

Labor:
[750]: 3,102 hours
[751]: 20 hours
Non-labor:
[A5C]: \$13,445 X 1.038 sales tax
Supplies (paper, envelopes, files, fire kings, toner, folders, rubber stamps, labels, etc.)

Request for additional detail should be made to Activity manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750		STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear 616.00 Hours
Factors		616 hours					
750		STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear 616.00 Hours
Factors		616 hours					
750		STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear 1.850.00 Hours
Factors		1850 Hours					
751		OVERTIME BASE & PRE.	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear 20.00 Hours
Factors		20 hours					
A5C		SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear 14.703.27 Dollars
Factors		1.038 use tax adder	14165 dollars				

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON		CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear 222.690.90 Dollars
Factors		222691 Dollars					

WBS No: 1HAJ20
Activity ID: 1HAJ200002

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ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	101.680.40	Dollars
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Factors 101680 Dollars

Activity ID: 1HAJ200003 Description: Radiological Health FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
HIS-20C19	HIS-20	1.00	each	HC	830	830	27.439	120.995	0	148.434	9.494	157.928
MTNHIDN501	Bioassav Sampling	1.00	ea	HC	1.880	1.880	55.236	5.001	0	60.237	19.112	79.349
MTNHIDN502	In-Vivo Counting	1.00	ea	HC	2.508	2.508	72.013	34.011	0	106.024	24.917	130.941
MTNHIDN503	Intake & Dose Assessment	1.00	ea	HC	950	950	31.283	52.477	0	83.760	10.824	94.584
MTNHIDN504	Internal Dosimetry Program Admin	1.00	ea	HC	2.961	2.961	95.181	6.892	0	102.073	32.933	135.006
MTNHIDS501B13	Routine Whole Body Dosimetry	1.00	each	HC	8.908	8.908	195.618	131.758	0	327.377	67.684	395.061
MTNHIDS503B14	Nuclear Accident Dosimetry	1.00	each	HC	101	101	3.335	3.570	0	6.905	1.154	8.059
MTNHIDS504B15	External Dose Reconstruction	1.00	each	HC	1.144	1.144	37.801	0	0	37.801	13.079	50.880
MTNHIDS506B16	External Dosimetry Program Admin	1.00	each	HC	2.225	2.225	74.811	0	0	74.811	25.884	100.695
MTNHIDU501C20	Radiological Records Files Maintenance	1.00	ea	HC	2.502	2.502	53.680	1.750	0	55.429	18.573	74.002
MTNHIDU502C21	Annual Report to DOE	1.00	ea	HC	462	462	12.276	0	0	12.276	4.247	16.523
MTNHIDU503C22	Annual Exposure Report Cards to Individuals	1.00	ea	HC	421	421	11.055	0	0	11.055	3.825	14.880
MTNHIDU504C23	Other Required Reports	1.00	ea	HC	428	428	11.276	0	0	11.276	3.902	15.178
MTNHIDU505C24	Radiological Records Program Admin	1.00	each	HC	2.088	2.088	70.516	9.895	0	80.412	24.399	104.810
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	381.061	381.061	0	381.061
Total for Activity 1HAJ200003:						27.407	751.521	366.349	381.061	1,498.931	260.026	1,758.958

Line Item HIS-20C19 - HIS-20

BOE

BOE Type HC
Source of Data:
Item Desc: HIS-20 System Support
Line Item Scope All dose information is stored in an electronic format as well as hard copy. The electronic format allows for reporting, tracking and trending of dose information, and provides a back-up for the hard copy information. The electronic databases require programming support from sub-contractors to maintain and improve the system. This activity provides for programming support based on experience gained in FY99 and anticipated needs for the HIS-20 database.
Breakdown of Historical Cost Data: Item: HIS-20 Support Units: 1 lot Unit Cost: 1,234 hours \$203,039 in ODCs: \$197,315 in subcontracted services and \$5,724 training/travel. Labor: 750: R632S [P080] 1224 hrs./yr. Provides HIS-20 system manager and computer security officer functions. Provides database administrator support functions including development of specialized queries, correcting data problems, providing support for database enhancements.
Non-labor: A5H: DynCorp I&E software Engineer 4 Database support for database development, development of reports, special reports, database & software modifications (\$113,120K). A5H: DynCorp I&E database administrator support for database management, and maintenance (\$37,500K). A5H: Canberra support for software phone support based on FY99 actuals (\$37,695) and software program enhancements anticipated (\$14,000). A5M: Travel for 1 to the HIS-20 Users Group Meeting in Meridan, CT per quote from RMRS Corporate travel on 3/1/99 (airfare \$511, hotel/per diem \$540, rental car \$260) A5M: Oracle database training for HIS-20 (2 local classes) based on price sheet from training class (\$4,413).
Unit Cost Adjustment Factor: Revised Unit Cost: Basis for Adjustment:
This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
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750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	830.48	Hours
Factors	1234 hours		0.673 unilateral reduct					
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	61.599.20	Dollars
Factors	113120 dollars		0.673 unilateral reduct					
						0.80913 [SYS 061400] .80704 - Svstem		
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	27.227.37	Dollars
Factors	50000 dollars		0.673 unilateral reduct					
						0.80913 [SYS 061400] .80704 - Svstem		
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	20.692.80	Dollars
Factors	38000 dollars		0.673 unilateral reduct					
						0.80913 [SYS 061400] .80704 - Svstem		
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	7.623.66	Dollars
Factors	14000 dollars		0.673 unilateral reduct					
						0.80913 [SYS 061400] .80704 - Svstem		
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	S100S	SSOC Salaried	Linear	2.969.95	Dollars
Factors	4413 dollars		0.673 unilateral reduct					
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	S100S	SSOC Salaried	Linear	882.30	Dollars
Factors	1311 dollars		0.673 unilateral reduct					

Line Item MTNHIDN501 - Bioassay Sampling

BOE

Source of Data:
Item Desc: Bioassay Sampling
Line Item Scope Bioassay is the determination of the quantities of radioactive materials in the bodies of workers by the measurement of these materials in the excreta (urine or feces). The bioassay task is broken down into sub-tasks. Subtasks include identifying who requires sampling, generating requests, tracking submission, tracking laboratory performance, reviewing data, formulating conclusions, and reporting the data. Routine Bioassay measurements are those samples collected on a periodic basis, and Special Bioassay measurements are those samples collected as a result of incidents or as part of an investigation into a potential intake of radioactive materials. The time estimates required for Internal Dosimetry to perform each sub-task are based on experience and judgment.
The number of analyses for the routine bioassay program is based on current FY00 levels of approximately 3,200 Radiation Worker II-qualified employees. It is anticipated that there will be 2,600 of these radiation workers in FY01 who will also have a current respirator fit. The FY01 budget request assumes that only this later population will be urine sampled for plutonium (2,600 analyses). In addition, approximately 160 of these workers are also designated for participation in the Uranium Workgroup Monitoring Program and will be sampled for uranium. For the rest of the Site, bioassay requirements for uranium and tritium are to be determined on a job-specific basis and are in addition to the annual plutonium requirement. It is anticipated that 50 such analyses will be required. It is also assumed that 90 analyses will be necessary to monitor workers with old intakes for purposes of possible re-evaluation. In addition, approximately 250 special fecal and 100 special urine samples will be required to support potential intake investigations. Ten percent of the analyses will require validation for quality control. This task provides bioassay results to affected employees and to Individual Radiation Exposure Records files.
The number of potential intakes, positive routine bioassay analyses, and positive wound counts in FY01 is based on historical data.
The bioassay program will utilize off-Site laboratories for analyses. The Analytical Laboratories (AL) are not budgeted here.
Breakdown of Historical Cost Data: Item: Routine and Special Bioassay Sampling Units: 1 lot Unit Cost: 2,793 hours \$5,232 Supplies
Labor: 2,793 hours 750: R100S [E050] 1700 hrs./yr. Bioassay coordinator functions, tracks, trends samples and laboratory performance. Coordinates blind audit program. Reviews data packets and screens bioassay results.
750: R100S [P080] 463 hrs./yr. Data review, investigation, reporting
750: R100S [P170] 630 hrs./yr. Bioassay scheduling, administration, reporting

WBS No: 1HAJ20
Activity ID: 1HAJ200003

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Non-Labor:
A5C: \$5,232
Supplies - bioassay sampling kits, cards \$1,774
Supplies - paper, envelopes, plastic bags \$1,169
Supplies - Kimwipes, misc. sampling supplies \$2,289

A5M: \$2,000
Travel to the Bioassay, Analytical, and Environmental Radiochemistry Conference in Seattle, WA. Based on \$300 registration, \$150/day per diem (7 days), and \$650 air fare. \$2,000

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	1,144.10	Hours
Factors	1700 hours				0.673 unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	311.60	Hours
Factors	463 hours				0.673 unilateral reduct			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	423.99	Hours
Factors	630 hours				0.673 unilateral reduct			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	3,654.94	Dollars
Factors	5232 dollars	1.038	use tax adjustment factor of 3.8%		0.673 unilateral reduct			
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	1,346.00	Dollars
Factors	2000 dollars				0.673 unilateral reduct			

Line Item MTNHIDN502 - In-Vivo Counting

BOE

Source of Data:

Item Desc: In-Vivo Counting

Line Item Scope
In-Vivo Counting is the direct measurement of the quantities of radioactive materials in the human body. At Rocky Flats, it consists of lung, other organ (liver, scull), or wound counting in specially designed low-background counting chambers, as well as screening wound counts in the decontamination facility. The In-Vivo Counting task is broken down into sub-tasks. The subtasks include identifying who requires counting, generating requests, tracking completion, performance of calibration and quality assurance activities, reviewing data, formulating conclusions, and reporting the data.

Routine lung counts are those counts performed on a periodic basis, and Special Lung Counts are those counts conducted as a result of incidents or as part of an investigation into a potential intake of radioactive materials. The time estimates required for Internal Dosimetry to perform each sub-task are based on experience and judgment. The number of lung counts based on current FY00 levels of approximately 3,200 Radiation Worker II-qualified employees. Annually there are also approximately 50 special lung counts. Since these are only a small percentage of the total counts and frequently displace scheduled counts, they are not budgeted separately. Due to workload limitations, only about 2,500 counts can be performed per year. This task provides lung count results to affected employees and to Individual Radiation Exposure Records files. There are also approximately 250 former employees recalled through the Health Effects Recall Program some of whom are lung and/or wound counted. However, this estimate does not include the 250 hours of projected funding from the Health Effects Group. The task also includes funding for a vendor-supplied maintenance contract on the lung counting equipment.

The wound count program is for people involved in potential intakes and for people with known or suspected wound depositions. The task entails the performance, analysis, review, quality assurance aspects and reporting of approximately 100 wound count results for employees who sustain injuries in Radiological Areas and 10 people with known wound depositions. There are two types of counts performed, screening and quantitative. This task provides wound count results to affected employees and to Individual Radiation Exposure History files. Radiological Safety Technical Supervisors may also perform screening wound counts after hours, but do not charge to this number. The task also includes funding for Health Physics Instrumentation (Alpha Group) services to maintain and calibrate the screening wound counters.

Non-labor dollar estimates are based on FY98 and FY99 actuals, or using vendor catalogs.

Breakdown of Historical Cost Data:
Item: In-Vivo Counting
Units: 1 lot
Unit Cost: 3,727 hours
\$61,863 cost

Labor: 3,727 hours

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Activity ID: 1HAJ200003

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750: K238S [P080] 925 hrs./yr.
Calibration, data review, investigation, reporting

750: R100S [P080] 462 hrs./yr.
Data review, investigation, reporting

750: R100S [P170] 2290 hrs./yr.
Scheduling, QA, counting, explanation of results

750: KH10H [T070] 50 hrs./yr.
Metrology support for calibration of sources

Non-Labor:
A5C: \$29,194
Supplies - germanium detector and wound counter repairs by vendor \$7,717
Supplies - liquid nitrogen supplies from an offsite vendor \$15,177
Supplies - paper clothes, booties, sticky mats \$5,725
Supplies - Mylar, cables, batteries, repair parts \$575

A5H: \$30,897
Alpha support for wound counter calibration and detector repair \$14,618
Canberra lung counter maintenance contract \$16,279

A5M: \$1,772
Travel to DOE Lung Count Conference. The amount is based on travel to Charleston, SC. Where the lung count conference was held in 1997. Travel is based on \$928 for airfare, hotel/per diem \$519.60 and \$325 car rental \$1,772

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	622.52	Hours
Factors	925 hours			0.673	unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	310.93	Hours
Factors	462 hours			0.673	unilateral reduct			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1,541.17	Hours
Factors	2290 hours			0.673	unilateral reduct			
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KH10H	EESH&Q Steelworkers	Linear	33.65	Hours
Factors	50 hours			0.673	unilateral reduct			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	15.993.15	Dollars
Factors	22894 dollars	1.038	use tax adjustment factor of 3.8%	0.673	unilateral reduct			
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	16.824.88	Dollars
Factors	30897 dollars			0.673	unilateral reduct			
0.80913 [SYS 061400] .80704 - System								
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	1.192.56	Dollars
Factors	1772 dollars			0.673	unilateral reduct			

Line Item MTNHIDN503 - Intake & Dose Assessment

BOE

Source of Data:

Item Desc: Intake and Dose Assessment

Line Item Scope
The task provides intake and dose assessments for radiation workers involved in potential intake (PI) incidents using methodologies recommended by the International Commission on Radiological Protection in Publications 26 and 30. The program includes Internal Dosimetry costs for data review and analysis; computer modeling and analysis; data reporting; and health risk briefings. The task provides for dose assessment results to affected employees and to Individual Radiation Exposure History File. The task estimates are based on FY99 actuals and projections of the number of potential intakes and positive routine samples. The task is based on 220 PI cases, 100 of which will result in a dose assessment performed. It is not possible to accurately estimate the

WBS No: 1HAJ20
Activity ID: 1HAJ200003

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number of people that will be involved in potential intakes or have positive bioassay results. The task also provides support to other functional groups within Radiological Safety and to Radiation Workers on an as needed basis. Costs include Internal Dosimetry's time for answering questions, providing special assessments, evaluating workplace data, conducting one-on-one health risk briefings with employees with internal depositions. Hours are based on FY99 actuals and estimates based on current or planned activities.

Breakdown of Historical Cost Data:

Item: Intake and Dose Assessment

Units: 1 lot

Unit Cost: 1,412 hours

\$96,369 cost

Labor: 1,412 hours

750: K238S [P080] 925 hrs./yr.

Dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review

750: R100S [P080] 462 hrs./yr.

Dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review

750: R100S [P170] 25 hrs./yr.

Dose assessment support

Non-Labor:

A5H: \$ 96,369

RMRS Corp employee for dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review. Based on \$51.46 per/hr x 1850 hrs. \$95,201

Subcontract for independent review of one internal dose assessment case \$1,168

Unit Cost Adjustment Factor:

Revised Unit Cost:

Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	622.52	Hours
Factors	925 hours			0.673	unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	310.93	Hours
Factors	462 hours			0.673	unilateral reduct			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	16.82	Hours
Factors	25 hours			0.673	unilateral reduct			
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	51.841.45	Dollars
Factors	1850 hours		51.46 dollars	0.673	unilateral reduct			
						0.80913	[SYS 061400] .80704 - System	
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	636.03	Dollars
Factors	1168 dollars			0.673	unilateral reduct			
						0.80913	[SYS 061400] .80704 - System	

Line Item MTNHIDN504 - Internal Dosimetry Program Admin

BOE

Source of Data:

Item Desc:

Line Item Scope

This task conducts the administrative aspects of a functional Internal Dosimetry program. The estimates are based on experience in FY00 and judgment. Included in this task are procedures maintenance, radioactive source inventory, property inventory, and secretarial and management support.

Breakdown of Historical Cost Data:

Item: Program management, oversight and administration

Units: 1 lot

WBS No: 1HAJ20
Activity ID: 1HAJ200003

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Unit Cost: 4,400 hours
\$9,866 cost

Labor: 4,400 hours
750: K238S [G010] 616 hrs./yr.
Administrative support by Rad. Health Secretary

750: K238S [M020] 616 hrs./yr.
Management oversight by Rad. Health Manager

750: K238S [P080] 1850 hrs./yr.
Team lead review of nasal/mouth results, routine urine results, dose assessment reports. Policy, procedure, and technical basis development.

750: R100S [P080] 463 hrs./yr.
Training, procedure and technical basis development, staff meetings

750: R100S [P170] 755 hrs./yr.
Training, procedure development, staff meetings, source control, property management

750: R100S [T060] 100 hrs./yr.
RCT support to source inventory, shipping, etc.

Non-Labor:
A5C: \$9,866
Supplies - office equipment repair parts \$1,800
Supplies - computer/printer upgrades, specialized software \$4,995
Supplies - NCRP/ICRP, and misc. publications \$870
Supplies - shipping charges for DOELAP and DOE Library phantoms, detectors being returned to vendor \$500
Supplies - professional dues based on 3 HPS dues at \$75/yr and 3 ABHP maintenance fees at \$50/yr \$375
Supplies - office supplies, paper, toner, binders, logbooks, safety shoes, safety glasses, etc. \$1,326

Unit Cost Adjustment Factor:
Revised Unit Cost:

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	414.57	Hours
Factors	616 hours			0.673	unilateral reduct			
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	414.57	Hours
Factors	616 hours			0.673	unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	1,245.05	Hours
Factors	1850 hours			0.673	unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	311.60	Hours
Factors	463 hours			0.673	unilateral reduct			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	508.11	Hours
Factors	755 hours			0.673	unilateral reduct			
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KH10H	EESH&Q Steelworkers	Linear	67.30	Hours
Factors	100 hours			0.673	unilateral reduct			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	6.892.13	Dollars
Factors	1.038 use tax adjustment factor of 3.8%	9866	dollars	0.673	unilateral reduct			

Line Item MTNHDS501B13 - Routine Whole Body Dosimetry

BOE

BOE Type HC

Source of Data:

Item Desc: Dosimetry Exchanges

Line Item Scope
The routine dosimetry task was broken down into sub-tasks required to complete the task. The time estimates required for External Dosimetry to perform each sub-task are based on experience and judgment gained in FY98 and FY99. No actual time studies were performed. Non-labor dollar estimates are based on FY98 and FY99 actuals, or using current vendor catalogs.

WBS No: 1HAJ20
Activity ID: 1HAJ200003

Rockv Flats Closure Project
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In FY 99, there were approximately 4300 radiation workers who exchanged dosimeters on a quarterly (some monthly) basis. The number of monitored individuals is similar thus far in FY00. This budget assumes there will be 4300 radiation workers in FY01. In addition, External Dosimetry anticipates providing 1000 Visitor dosimeters during FY01, based on the number of dosimeters issued from January 1999 to January 2000. Additional dosimeters are issued for special studies, multiple dosimeters, etc. The annual throughput expected in FY01 is 20,000 dosimeters handled per year (5,000 x 4 quarters = 20,000). Element Correction Factors (ECFs) are determined once/year for each TLD, and require additional processing.

Breakdown of Historical Cost Data:

Item: Whole body, extremity and area TLD exchanges.

Units: 1 lot

Unit Cost: 13,236 hours

\$329,953

Labor: 13,236 hours

750: R632S [M010] 1850 hrs./yr.

First Line Supervisor/Manager, Dose processing and review, Dosimeter investigations Environmental TLDs (processing, review and reporting) and Area monitoring TLDs (processing, review and reporting).

750: R632S [KH10H] 9,250 hrs.

To perform routine TLD exchanges based on FY99 experience, process routine TLD's, ECF the TLD population, Issue new and non-routine dosimetry from building 112, and process non-routine (monthly and terminating employees) on an as needed basis.

750: R632S [P080] 1776 hrs./yr.

Reviewing final dose processing results, set up of the dose reconstruction files, reader maintenance and calibrations, DOELAP preparation and testing, file maintenance, dose studies, dose investigations, and ECF generation.

751: R632S [M010] 60 hrs./yr.

Provides supervisory coverage and performs dose processing during the four quarterly exchanges, performed on off-shifts.

751: R632S [KH10H] 300 hrs./yr.

To perform four off-shift (AWS days) quarterly exchanges. Exchanges performed off-shifts since most dosimeters are on the storage board at that time, and to minimize impact on projects.

Non-Labor:

A5C: \$123,315

Replacement Panasonic TLDs (600 Panasonic 809 @ 69.50 ea. = \$41,700) \$41,700

Whole body TLD replacement holders (1000 @ \$45.13 ea. = \$45,130) \$45,130

Wrist dosimetry holder (500 @ \$8.97 ea. = \$4,485) \$4,485

Lab supplies - Computer/Printer upgrades, film, ID Cards, Laminate Coverings, paper, labels, printer ribbons, etc. \$32,000

A5H \$206,638

Stanford Dosimetry for technical and algorithm support \$37,500

Alpha group for the daily cleaning and minor maintenance of the Panasonic TLD readers

\$9,844

Consultant support for DOELAP testing and support. This includes modifications to the new RGSC software, pure field irradiation testing, and algorithm development/enhancement \$45,559

ECF irradiation's \$5,000

Maintenance/Service of the UPS system which supports the Panasonic TLD readers

\$5,000

Digital Equipment support for Computers and Printers \$2,985

Panasonic maintenance contract on three readers \$16,200

Panasonic maintenance contract on TLD badge exchanger \$6,750

Battelle irradiation contract - Calibration Services for the Panasonic readers \$50,000

Training contract for External Dosimetry \$10,000

Antech Service Contract for the WE Irradiator \$9,800

RGSC External Dosimetry software maintenance \$8,000

A5M: \$4,441

Panasonic Conference: \$1,691

(for FY00 conference; Airfare \$484.00, Car rental \$205.00, Lodging \$835, and registration \$167)

External Dosimetry Training: \$2,750

(Plato Dosimetry Training Class (estimated airfare \$500, Car rental \$200, lodging \$850, and registration \$1,200)

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Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I / CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	6.225.25	Hours
Factors	9250 hrs				0.673 unilateral reduct			
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	1.245.05	Hours
Factors	1850 hours				0.673 unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.195.25	Hours
Factors	1776 hours				0.673 unilateral reduct			
751	OVERTIME BASE & PRE.	L050	MISSION SUP SPEC I / CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	201.90	Hours
Factors	300 hours				0.673 unilateral reduct			
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	40.38	Hours
Factors	60 hours				0.673 unilateral reduct			
A5C	SUPPLIES	0000	NONE	K238S	Radiation Protection	Linear	10.000.00	Dollars
Factors	10000 dollars							FY00 adi up recon
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	6.245.49	Dollars
Factors	1.038 use tax adjustment factor of 3.8%		123315 dollars		0.673 unilateral reduct	0.0725		FY00 adi up recon
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	112.524.20	Dollars
Factors	206638 dollars				0.673 unilateral reduct			
						0.80913		ISYS 0614001.80704 - Svsstem
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	2.988.79	Dollars
Factors	4441 Dollars				0.673 unilateral reduct			

Line Item MTNHIDS503B14 - Nuclear Accident Dosimetry

BOE

BOE Type HC

Source of Data:

Item Desc: Nuclear Accident Dosimetry

Line Item Scope
The nuclear accident dosimetry (NAD) system is maintained operational at all times. This task includes the time to maintain, operate, and calibrate the NAD equipment. Energy calibrations and equipment QA source checks are performed weekly. A complete system calibration is performed semi-annually.

Breakdown of Historical Cost Data:
Item: Nuclear Accident Dosimetry
Units: 1 lot
Unit Cost: 150 hours
\$6,555

Labor:
750: R632S [P080] 150 hours
Weekly equipment calibration (52 wk. x 2 hr./wk) 104 hr./y
Semi Annual calibration (2 cal x 23 hr./cal) 46 hr./y

Non-Labor:
A5H: \$6,555
Cleaning, maintenance, calibrations and QC's on the Harshaw readers (Alpha) \$3,555
Nitrogen gas for the operation of the Harshaw Readers \$3,000

Request for additional detail should be made to Activity Manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1HAJ20
Activity ID: 1HAJ200003

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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		P080	HEALTH PHYSICISTS		R100S	RMRS Salaried	Linear	100.95 Hours
	Factors	150	hours			0.673	unilateral reduct			
	A5H	SUBCONTRACTED SRVS		0000	NONE		R100S	RMRS Salaried	Linear	3.569.51 Dollars
	Factors	6555	Dollars			0.673	unilateral reduct			
0.80913 [SYS 061400] .80704 - System										

Line Item MTNHIDS504B15 - External Dose Reconstruction

BOE	BOE Type HC
Source of Data:	
Item Desc: External Dosimetry Dose Reconstructions	
Line Item Scope Periodically, an employee's external dose cannot be determined through conventional methods. This may happen if the TLD fails, the reader malfunctions, or if the employee loses or damages the TLD. In this case, a dose reconstruction is necessary in order to determine a dose of record. The dose reconstruction process ranges from a simple one to a very complex reconstruction requiring several hours to complete. This task covers the costs necessary to perform the investigation and report generation required for dose reconstructions. It is anticipated that there will be 450 dose reconstructions that require a complete investigation in FY01, based on the actual number of dose reconstructions completed in FY99 and number of hours on average required per reconstruction.	
Breakdown of Historical Cost Data: Item: External Dosimetry Dose Reconstructions Units: 1 lot Unit Cost: 1700 hours	
Labor: 750: R632S [P080] 1700 hrs. Performance of Dose Reconstructions (450 x 3.78 hours each) = 1700 hr./yr.	
Non-Labor: None required	
Request for additional detail should be made to Activity Manager S. Baker or S. Pike	
Unit Cost Adjustment Factor:	
Revised Unit Cost:	
Basis for Adjustment:	

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.144.10	Hours
Factors		1700	hours			0.673	unilateral reduct		

Line Item MTNHIDS506B16 - External Dosimetry Program Admin

BOE	BOE Type HC
Source of Data:	
Item Desc: External Dosimetry Program Admin	
Line Item Scope This task provides for the administrative functions for the department including: maintenance of Dosimetry historical data; procedures review and revision; property inventory; Radiological Records support and QA checks; training; maintenance of the readers, glow curve boxes, calibration, heating adjustments of the readers; contract administration; contamination surveys; and management and secretarial support.	
Breakdown of Historical Cost Data: Item: External Dosimetry Program Admin Units: 1 lot Unit Cost: 3,922 hours	
Labor: 3,922 hours 750: K238S [M020] 616 hours. Provides management support and overview.	

WBS No: 1HAJ20
Activity ID: 1HAJ200003

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750: K238S [G010] 616 hours.
Provides secretarial support.

750: R632S [E050] 150 hours.
Provides administrative functions and procedure review/revision.

750: R632s [P080] 2540 hours.
Provides other Admin/Professional actives, program management, property inventory, Annual report review, Annual report card reviews, Data entry reviews and general problem solving, maintenance support, program support, and training.

Non-Labor:
None required

Request for additional detail should be made to Activity manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	100.95	Hours
<i>Factors</i>	150 hours		0.673 unilateral reduct					
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	414.57	Hours
<i>Factors</i>	616 hours		0.673 unilateral reduct					
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	414.57	Hours
<i>Factors</i>	616 hours		0.673 unilateral reduct					
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	654.16	Hours
<i>Factors</i>	972 hours		0.673 unilateral reduct					
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	640.70	Hours
<i>Factors</i>	952 hours		0.673 unilateral reduct					

Line Item MTNHIDU501C20 - Radiological Records Files Maintenance

BOE

BOE Type HC

Source of Data:

Line Item Scope
The number of monitored radiation workers with radiation exposure files is based on FY00 levels of about 4,300. This budget assumes there will be no more than 4,300 radiation workers in FY01.

Specific tasks include data entry, records filing, archiving and retrieval from the Federal Records Center. There are projected to be about 450 dose reconstructions in FY 01, which must be reviewed, tracked, and posted separate from other dosimetry data, and filed in individual's exposure history files. Visitor reports for monitored visitors must be generated after each visit to the Site.

Breakdown of Historical Cost Data:
Item: File Maintenance
Units: 1 lot
Unit Cost: 3,717 hours

Labor:

750: R632S 3,700 hr. Based on 4,300 active radiation workers
[P170] Previous exposure history program, archiving, retrieving records 1,850 hr.
[G010] Dose Reconstructions 250 hr.
[G010] HIS-20 Data Entry 550 hr.
[G010] Exposure Records filing: 550 hr.
[G010] Visitor dosimetry program 250 hr.
[G010] HIS-20 Help desk suppor 250 hr.

751: R632S 17 hr. Based on 4,300 active radiation workers
[G010] Overtime support OT for archivin 17 hr./yr.
A55 - Records Center handling 40 boxes X 65.00

Non labor:
None required

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Activity ID: 1HAJ200003

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Request for additional details should be made to Activity manager S. Baker or S. Pike
Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	1.245.05	Hours
Factors	1850 hours				0.673 unilateral reduct			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1.245.05	Hours
Factors	1850 hours				0.673 unilateral reduct			
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	11.44	Hours
Factors	17 hours				0.673 unilateral reduct			
A55	SOURCE ONE	0000	NONE	K238S	Radiation Protection	Linear	1.749.80	Dollars
Factors	40 BOXES		65 DOLLARS		0.673 unilateral reduct			

Line Item MTNHIDU502C21 - Annual Report to DOE

BOE

BOE Type HC

Source of Data:

Item Desc: Annual Report to DOE

Line Item Scope
An annual report of all occupational radiation exposure is required to be prepared and delivered to the DOE by March 31, 2001. The report is automatically generated from the Records computer system (HIS-20).

Specific tasks include; report generation, QC review for data quality to ensure results are generated as entered into the databases, QC review for format, demographic data manipulation (editing and verification), dose reconstruction data correction, and distribution of the report.

Breakdown of Historical Cost Data:
Item:
Units: 1 lot
Unit Cost: 686 hrs
Labor:
750: 618 hours
751: 68 hrs.

Non-labor:
None required

Request for additional detail should be made to Activity manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	415.91	Hours
Factors	618 hours				0.673 unilateral reduct			
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	45.76	Hours
Factors	68 hours				0.673 unilateral reduct			

Line Item MTNHIDU503C22 - Annual Exposure Report Cards to Individuals

BOE

BOE Type HC

Source of Data:

Item Desc: Annual Exposure Report Cards to Individuals

Line Item Scope
Annual Occupational Radiation Exposure Reports (report cards) are printed for all monitored employees for the previous calendar year's exposure. Duplicate report cards are printed to provide individuals personal copy and record file copy. The report cards are distributed through U.S. Mail. This budget assumes

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Activity ID: 1HAJ200003

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Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

there will be no more than 4,300 radiation workers in FY01 requiring report cards.

Specific tasks are; data quality assurance verification performed on report cards to ensure doses reported match the Annual Report and the database, updating the mailing list, folding reports, inserting them into envelopes, addressing reports, and mailing them, and filing record file copy of the report card.

Breakdown of Historical Cost Data:

Item: Exposure Report Cards

Units: 1 lot

Unit Cost: 625 hrs

Labor:

[750] 616 hrs

[751] 9 hrs

Non-labor:

None required:

Request for additional detail should be made to Activity manager S. Baker of S. Pike

Unit Cost Adjustment Factor:

Revised Unit Cost:

Basis for Adjustment

Resources		Cost Element		Skill		Department		Curve	Quantity	Units
750		STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	414.57	Hours
		Factors	616	hours	0.673	unilateral reduct				
751		OVERTIME BASE & PRE.		P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	6.06	Hours
		Factors	9	hours	0.673	unilateral reduct				

Line Item MTNHIDU504C23 - Other Required Reports

BOE	BOE Type HC
	Source of Data:
	Item Desc: Other Required Reports
	Line Item Scope
	Several other types of reports are required to be provided to individuals, Radiological Protection, DOE, or to line management. Some of the reports are routinely scheduled such as quarterly high-to-low exposure reports. Others are provided as requested such as Freedom of Information (FOIA) or legal requests. The number of reports requested and the time required to produce them is based on experience and assuming 4,300 radiation workers.
	Employees may request copies of their radiation exposure files whenever they want. In addition, terminating employees, former employees or legal representation may request file copies. Historically, approximately 60 file copies are requested per year. These must be photocopied, assembled, inventoried, and issued. Computer generated summary reports are also provided to visitors or terminating employees who request them. This activity also supports requesting radiation dose history from former employers of new radiation workers, and providing exposure histories to other facilities when requested.
	Dose reports organized from highest exposure to lowest exposure are provided to management and Radiological Control. These may be routine quarterly ALARA Reports (high-to-low) or non-routine ALARA reports. Routine reports must be generated, sorted and distributed. Non-routine reports may require sub-contractor time for programming support.
	Breakdown of Historical Cost Data:
	Item: Report preparation and distribution
	Units: 1 lot
	Unit Cost: 636 hrs
	Labor:
	[750]: 616 hrs
	[751]: 20 hrs.
	Non-labor:
	None required
	Request for additional detail should be made to Activity manager S. Baker or S. Pike
	Unit Cost Adjustment Factor:
	Revised Unit Cost:

WBS No: 1HAJ20
Activity ID: 1HAJ200003

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Project Baseline Devl
WBS Filter 1HAJ
Activity Filter * Starts In FY *

Basis for Adjustment

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	414.57	Hours
Factors	616 hours	0.673	unilateral reduct					
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	13.46	Hours
Factors	20 hours	0.673	unilateral reduct					

Line Item MTNHIDU505C24 - Radiological Records Program Admin

BOE

BOE Type HC

Source of Data:

Item Desc: Radiological Records Program Admin

Line Item Scope
This task conducts the management and administrative aspects of a functional Radiological Records program. Specific tasks include setting daily assignments, monitoring performance, conducting performance reviews, budget, property management, staff meetings and communications, customer interface, and administrative functions. The estimates are based on experience in FY99 and judgment.

Breakdown of Historical Cost Data:
Item: Radiological Records Program Admin
Units: 1 lot
Unit Cost: 3122 hrs, A5C supplies \$14,165

Labor:
[750]: 3,102 hours
[751]: 20 hours
Non-labor:
[A5C]: \$13,445 X 1.038 sales tax
Supplies (paper, envelopes, files, fire kings, toner, folders, rubber stamps, labels, etc.)

Request for additional detail should be made to Activity manager S. Baker or S. Pike

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	414.57	Hours
Factors	616 hours	0.673	unilateral reduct					
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	414.57	Hours
Factors	616 hours	0.673	unilateral reduct					
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.245.05	Hours
Factors	1850 Hours	0.673	unilateral reduct					
751	OVERTIME BASE & PRE.	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	13.46	Hours
Factors	20 hours	0.673	unilateral reduct					
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	9.895.30	Dollars
Factors	1.038 use tax adder	14165 dollars	0.673	unilateral reduct				

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	275.397.00	Dollars
Factors	275397 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	105.664.30	Dollars
Factors	105664 Dollars							

Activity ID: 1HAJ200004 Description: Radiological Health FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
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WBS No: 1HAJ20
Activity ID: 1HAJ200004

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HIS-20C25	HIS-20	1.00	each	HC	798	798	26.379	10.470	0	36.849	7.439	44.288
MTNHIDN501	Bioassav Samplina	1.00	ea	HC	1.807	1.807	53.102	3.514	0	56.616	14.975	71.591
MTNHIDN502	In-Vivo Counting	1.00	ea	HC	1.214	1.214	37.835	35.781	0	73.617	10.670	84.286
MTNHIDN503	Intake & Dose Assessment	1.00	ea	HC	914	914	30.074	50.450	0	80.524	8.481	89.005
MTNHIDN504	Internal Dosimetrv Program Admin	1.00	ea	HC	2.847	2.847	91.504	1.142	0	92.646	25.804	118.451
MTNHIDS501B17	Routine Whole Body Dosimetrv	1.00	each	HC	6.170	6.170	133.013	72.891	0	205.905	37.510	243.414
MTNHIDS503B18	Nuclear Accident Dosimetrv	1.00	each	HC	97	97	3.207	0	0	3.207	904	4.111
MTNHIDS504B19	External Dose Reconstruction	1.00	each	HC	1.100	1.100	36.341	0	0	36.341	10.248	46.589
MTNHIDS506B20	External Dosimetrv Program Admin	1.00	each	HC	1.341	1.341	45.541	0	0	45.541	12.843	58.384
MTNHIDU501C26	Radiological Records Files Maintenance	1.00	ea	HC	1.208	1.208	20.210	1.682	0	21.892	5.699	27.591
MTNHIDU502C27	Annual Report to DOE	1.00	ea	HC	444	444	11.802	0	0	11.802	3.328	15.130
MTNHIDU503C28	Annual Exposure Report Cards to Individuals	1.00	ea	HC	405	405	10.645	0	0	10.645	3.002	13.647
MTNHIDU504C29	Other Required Reports	1.00	ea	HC	412	412	10.857	0	0	10.857	3.062	13.919
MTNHIDU505C30	Radiological Records Program Admin	1.00	each	HC	2.007	2.007	67.792	6.716	0	74.508	19.117	93.625
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	131.688	131.688	0	131.688
Total for Activity 1HAJ200004:						20.764	578.302	182.647	131.688	892.637	163.081	1.055.718

Line Item HIS-20C25 - HIS-20

BOE

BOE Type HC

Source of Data:

Item Desc: HIS-20 System Support

Line Item Scope
All dose information is stored in an electronic format as well as hard copy. The electronic format allows for reporting, tracking and trending of dose information, and provides a back-up for the hard copy information. The electronic databases require programming support from sub-contractors to maintain and improve the system. This activity provides for programming support based on experience gained in FY99 and anticipated needs for the HIS-20 database.

Breakdown of Historical Cost Data:
Item: HIS-20 Support
Units: 1 lot
Unit Cost: 1,234 hours
\$20,000 in ODCs: \$20,000 in subcontracted services.
Labor:
750: R632S [P080] 1224 hrs./yr.
Provides HIS-20 system manager and computer security officer functions. Provides database administrator support functions including development of specialized queries, correcting data problems, providing support for database enhancements.

Non-labor:
A5H: DynCorp I&E software Engineer 4 Database support for database development, development of reports, special reports, database & software modifications \$15,000.
A5H: DynCorp I&E database administrator support for database management, and maintenance \$5,000.

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	798.40	Hours
Factors	1234 hours			0.647	unilateral reduct			
A5H	SUBCONTRACTED SRVS	0000	NONE	S100S	SSOC Salaried	Linear	10.470.20	Dollars
Factors	20000 dollars			0.647	unilateral reduct			

0.80913 [SYS 061400] .80704 - System

Line Item MTNHIDN501 - Bioassay Sampling

BOE

BOE Type HC

Source of Data:

WBS No: 1HAJ20
Activity ID: 1HAJ200004

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Baseline Cost and Basis of Estimate

Project Baseline Devl
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Activity Filter *

Starts In FY *

Item Desc: Bioassay Sampling

Line Item Scope

Bioassay is the determination of the quantities of radioactive materials in the bodies of workers by the measurement of these materials in the excreta (urine or feces). The bioassay task is broken down into sub-tasks. Subtasks include identifying who requires sampling, generating requests, tracking submission, tracking laboratory performance, reviewing data, formulating conclusions, and reporting the data. Routine Bioassay measurements are those samples collected on a periodic basis, and Special Bioassay measurements are those samples collected as a result of incidents or as part of an investigation into a potential intake of radioactive materials. The time estimates required for Internal Dosimetry to perform each sub-task are based on experience and judgment.

The number of analyses for the routine bioassay program is based on current FY00 levels of approximately 3,200 Radiation Worker II-qualified employees. It is anticipated that there will be 2,600 of these radiation workers in FY04 who will also have a current respirator fit. The FY04 budget request assumes that only this later population will be urine sampled for plutonium (2,600 analyses). In addition, approximately 160 of these workers are also designated for participation in the Uranium Workgroup Monitoring Program and will be sampled for uranium. For the rest of the Site, bioassay requirements for uranium and tritium are to be determined on a job-specific basis and are in addition to the annual plutonium requirement. It is anticipated that 50 such analyses will be required. It is also assumed that 90 analyses will be necessary to monitor workers with old intakes for purposes of possible re-evaluation. In addition, approximately 250 special fecal and 100 special urine samples will be required to support potential intake investigations. Ten percent of the analyses will require validation for quality control. This task provides bioassay results to affected employees and to Individual Radiation Exposure Records files.

The number of potential intakes, positive routine bioassay analyses, and positive wound counts in FY04 is based on historical data.

The bioassay program will utilize off-Site laboratories for analyses. The Analytical Laboratories (AL) are not budgeted here.

Breakdown of Historical Cost Data:

Item: Routine and Special Bioassay Sampling

Units: 1 lot

Unit Cost: 2,793 hours

\$5,232 Supplies

Labor: 2,793 hours

750: R100S [E050] 1700 hrs./yr.

Bioassay coordinator functions, tracks, trends samples and laboratory performance. Coordinates blind audit program. Reviews data packets and screens bioassay results.

750: R100S [P080] 463 hrs./yr.

Data review, investigation, reporting

750: R100S [P170] 630 hrs./yr.

Bioassay scheduling, administration, reporting

Non-Labor:

A5C: \$5,232

Supplies - bioassay sampling kits, cards \$1,774

Supplies - paper, envelopes, plastic bags \$1,169

Supplies - Kimwipes, misc. sampling supplies \$2,289

Unit Cost Adjustment Factor:

Revised Unit Cost:

Basis for Adjustment:

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	1.099.90	Hours
Factors	1700 hours				0.647 unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	299.56	Hours
Factors	463 hours				0.647 unilateral reduct			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	407.61	Hours
Factors	630 hours				0.647 unilateral reduct			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	3.513.74	Dollars
Factors	5232 dollars		1.038 use tax adjustment factor of 3.8%		0.647 unilateral reduct			

Line Item MTNHIDN502 - In-Vivo Counting

BOE BOE Type HC

WBS No: 1HAJ20
Activity ID: 1HAJ200004

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1HAJ
*

Starts In FY *

Source of Data:

Item Desc: In-Vivo Counting

Line Item Scope

In-Vivo Counting is the direct measurement of the quantities of radioactive materials in the human body. At Rocky Flats, it consists of lung, other organ (liver, scull), or wound counting in specially designed low-background counting chambers, as well as screening wound counts in the decontamination facility. The In-Vivo Counting task is broken down into sub-tasks. The subtasks include identifying who requires counting, generating requests, tracking completion, performance of calibration and quality assurance activities, reviewing data, formulating conclusions, and reporting the data.

Routine lung counts are those counts performed on a periodic basis, and Special Lung Counts are those counts conducted as a result of incidents or as part of an investigation into a potential intake of radioactive materials. The time estimates required for Internal Dosimetry to perform each sub-task are based on experience and judgment. The number of lung counts based on current FY00 levels of approximately 3,200 Radiation Worker II-qualified employees. Annually there are also approximately 50 special lung counts. Since these are only a small percentage of the total counts and frequently displace scheduled counts, they are not budgeted separately. Due to workload limitations, only about 2,500 counts can be performed per year. This task provides lung count results to affected employees and to Individual Radiation Exposure Records files. There are also approximately 250 former employees recalled through the Health Effects Recall Program some of whom are lung and/or wound counted. However, this estimate does not include the 250 hours of projected funding from the Health Effects Group. The task also includes funding for a vendor-supplied maintenance contract on the lung counting equipment.

The wound count program is for people involved in potential intakes and for people with known or suspected wound depositions. The task entails the performance, analysis, review, quality assurance aspects and reporting of approximately 100 wound count results for employees who sustain injuries in Radiological Areas and 10 people with known wound depositions. There are two types of counts performed, screening and quantitative. This task provides wound count results to affected employees and to Individual Radiation Exposure History files. Radiological Safety Technical Supervisors may also perform screening wound counts after hours, but do not charge to this number. The task also includes funding for Health Physics Instrumentation (Alpha Group) services to maintain and calibrate the screening wound counters.

Non-labor dollar estimates are based on FY98 and FY99 actuals, or using vendor catalogs.

Breakdown of Historical Cost Data:

Item: In-Vivo Counting

Units: 1 lot

Unit Cost: 1,877 hours

\$60,091 cost

Labor: 1,877 hours

750: K238S [P080] 925 hrs./yr.

Calibration, data review, investigation, reporting

750: R100S [P080] 462 hrs./yr.

Data review, investigation, reporting

750: R100S [P170] 440 hrs./yr.

Scheduling, QA, counting, explanation of results

750: KH10H [T070] 50 hrs./yr.

Metrology support for calibration of sources

Non-Labor:

A5C: \$29,194

Supplies - germanium detector and wound counter repairs by vendor \$7,717

Supplies - liquid nitrogen supplies from an offsite vendor \$15,177

Supplies - paper clothes, booties, sticky mats \$5,725

Supplies - Mylar, cables, batteries, repair parts \$575

A5H: \$30,897

Alpha support for wound counter calibration and detector repair \$14,618

Canberra lung counter maintenance contract \$16,279

Unit Cost Adjustment Factor:

Revised Unit Cost:

Basis for Adjustment:

WBS No: 1HAJ20
Activity ID: 1HAJ200004

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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WBS Filter
Activity Filter
Baseline Devl
1HAJ
*

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	598.48	Hours
Factors	925 hours				0.647 unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	298.91	Hours
Factors	462 hours				0.647 unilateral reduct			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	284.68	Hours
Factors	440 hours				0.647 unilateral reduct			
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KH10H	EESH&Q Steelworkers	Linear	32.35	Hours
Factors	50 hours				0.647 unilateral reduct			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	19.606.28	Dollars
Factors	29194 dollars		1.038 use tax adjustment factor of 3.8%		0.647 unilateral reduct			
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	16.174.88	Dollars
Factors	30897 dollars				0.647 unilateral reduct			

0.80913 [SYS 061400] .80704 - System

Line Item MTNHIDN503 - Intake & Dose Assessment

BOE

BOE Type HC

Source of Data:

Item Desc: Intake and Dose Assessment

Line Item Scope

The task provides intake and dose assessments for radiation workers involved in potential intake (PI) incidents using methodologies recommended by the International Commission on Radiological Protection in Publications 26 and 30. The program includes Internal Dosimetry costs for data review and analysis; computer modeling and analysis; data reporting; and health risk briefings. The task provides for dose assessment results to affected employees and to Individual Radiation Exposure History File. The task estimates are based on FY99 actuals and projections of the number of potential intakes and positive routine samples. The task is based on 220 PI cases, 100 of which will result in a dose assessment performed. It is not possible to accurately estimate the number of people that will be involved in potential intakes or have positive bioassay results. The task also provides support to other functional groups within Radiological Safety and to Radiation Workers on an as needed basis. Costs include Internal Dosimetry's time for answering questions, providing special assessments, evaluating workplace data, conducting one-on-one health risk briefings with employees with internal depositions. Hours are based on FY99 actuals and estimates based on current or planned activities.

Breakdown of Historical Cost Data:

Item: Intake and Dose Assessment

Units: 1 lot

Unit Cost: 3,262 hours

\$96,369 cost

Labor: 3,262 hours

750: K238S [P080] 925 hrs./yr.

Dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review

750: R100S [P080] 462 hrs./yr.

Dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review

750: R100S [P170] 25 hrs./yr.

Dose assessment support

Non-Labor:

A5H: \$ 96,369

RMRS Corp employee for dose assessment, investigation, data compilation and review, assessment and modeling, data reporting, individual briefings, briefings to management and DOE, radiation worker support, and assessment peer review. Based on \$51.46 per/hr x 1850 hrs.

Subcontract for independent review of one internal dose assessment case \$1,168

Unit Cost Adjustment Factor:

WBS No: 1HAJ20
Activity ID: 1HAJ200004

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Activity Filter *

Starts In FY *

Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	598.48	Hours
Factors	925 hours				0.647 unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	298.91	Hours
Factors	462 hours				0.647 unilateral reduct			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	16.18	Hours
Factors	25 hours				0.647 unilateral reduct			
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	49.838.66	Dollars
Factors	1850 hours		51.46 dollars		0.647 unilateral reduct			
						0.80913 [SYS 061400]	.80704 - System	
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	611.46	Dollars
Factors	1168 dollars				0.647 unilateral reduct			
						0.80913 [SYS 061400]	.80704 - System	

Line Item MTNHIDN504 - Internal Dosimetry Program Admin

BOE

BOE Type HC

Source of Data:

Item Desc:

Line Item Scope

This task conducts the administrative aspects of a functional Internal Dosimetry program. The estimates are based on experience in FY00 and judgment. Included in this task are procedures maintenance, radioactive source inventory, property inventory, and secretarial and management support.

Breakdown of Historical Cost Data:

Item: Program management, oversight and administration

Units: 1 lot

Unit Cost: 4,400 hours

\$1,701 cost

Labor: 4,400 hours

750: K238S [G010] 616 hrs./yr.

Administrative support by Rad. Health Secretary

750: K238S [M020] 616 hrs./yr.

Management oversight by Rad. Health Manager

750: K238S [P080] 1850 hrs./yr.

Team lead review of nasal/mouth results, routine urine results, dose assessment reports. Policy, procedure, and technical basis development.

750: R100S [P080] 463 hrs./yr.

Training, procedure and technical basis development, staff meetings

750: R100S [P170] 755 hrs./yr.

Training, procedure development, staff meetings, source control, property management

750: R100S [T060] 100 hrs./yr.

RCT support to source inventory, shipping, etc.

Non-Labor:

A5C: \$1,701

Supplies - professional dues based on 3 HPS dues at \$75/yr and 3 ABHP maintenance fees at \$50/yr \$375

Supplies - office supplies, paper, toner, binders, logbooks, safety shoes, safety glasses, etc. \$1,326

WBS No: 1HAJ20
Activity ID: 1HAJ200004

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Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	398.55	Hours
	Factors	616	hours			0.647 unilateral reduct			
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	398.55	Hours
	Factors	616	hours			0.647 unilateral reduct			
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	1.196.95	Hours
	Factors	1850	hours			0.647 unilateral reduct			
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	299.56	Hours
	Factors	463	hours			0.647 unilateral reduct			
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	488.49	Hours
	Factors	755	hours			0.647 unilateral reduct			
	750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	KH10H	EESH&Q Steelworkers	Linear	64.70	Hours
	Factors	100	hours			0.647 unilateral reduct			
	A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	1.142.37	Dollars
	Factors	1.038	use tax adjustment factor of 3.8%	1701	dollars	0.647 unilateral reduct			

Line Item MTNHIDS501B17 - Routine Whole Body Dosimetry

BOE	BOE Type HC
	Source of Data:
	Item Desc: Dosimetry Exchanges
	Line Item Scope The routine dosimetry task was broken down into sub-tasks required to complete the task. The time estimates required for External Dosimetry to perform each sub-task are based on experience and judgment gained in FY98 and FY99. No actual time studies were performed. Non-labor dollar estimates are based on FY98 and FY99 actuals, or using current vendor catalogs.
	In FY 99, there were approximately 4300 radiation workers who exchanged dosimeters on a quarterly (some monthly) basis. The number of monitored individuals is similar thus far in FY00. This budget assumes there will be 4300 radiation workers in FY04. In addition, External Dosimetry anticipates providing 1000 Visitor dosimeters during FY04, based on the number of dosimeters issued from January 1999 to January 2000. Additional dosimeters are issued for special studies, multiple dosimeters, etc. The annual throughput expected in FY04 is 20,000 dosimeters handled per year (5,000 x 4 quarters = 20,000). Element Correction Factors (ECFs) are determined once/year for each TLD, and require additional processing.
	Breakdown of Historical Cost Data: Item: Whole body, extremity and area TLD exchanges. Units: 1 lot Unit Cost: 9,476 hours \$133,579
	Labor: 9,476 hours 750: R632S [KH10H] 7,400 hrs. To perform routine TLD exchanges based on FY99 experience, process routine TLD's, ECF the TLD population, Issue new and non-routine dosimetry from building 112, and process non-routine (monthly and terminating employees) on an as needed basis.
	750: R632S [P080] 1776 hrs./yr.Reviewing final dose processing results, set up of the dose reconstruction files, reader maintenance and calibrations, DOELAP preparation and testing, file maintenance, dose studies, dose investigations, and ECF generation.
	751: R632S [KH10H] 300 hrs./yr. To perform four off-shift (AWS days) quarterly exchanges. Exchanges performed off-shifts since most dosimeters are on the storage board at that time, and to minimize impact on projects.
	Non-Labor: A5C: \$20,000 Lab supplies - Computer/Printer upgrades, film, ID Cards, Laminate Coverings, paper, labels, printer ribbons, etc. \$20,000
	A5H \$113,579 Stanford Dosimetry for technical and algorithm support \$10,000

WBS No: 1HAJ20
Activity ID: 1HAJ200004

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WBS Filter 1HAJ
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Alpha group for the daily cleaning and minor maintenance of the Panasonic TLD readers \$9,844
Digital Equipment support for Computers and Printers \$2,985
Panasonic maintenance contract on three readers \$16,200
Panasonic maintenance contract on TLD badge exchanger \$6,750
Battelle irradiation contract - Calibration Services for the Panasonic readers \$50,000
Antech Service Contract for the WE Irradiator \$9,800
RGSC External Dosimetry software maintenance \$8,000

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	4.787.80	Hours
Factors	7400 hrs			0.647	unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.149.07	Hours
Factors	1776 hours			0.647	unilateral reduct			
751	OVERTIME BASE & PRE.	L050	MISSION SUP SPEC I (CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	194.10	Hours
Factors	300 hours			0.647	unilateral reduct			
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	38.82	Hours
Factors	60 hours			0.647	unilateral reduct			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	13.431.72	Dollars
Factors	1.038 use tax adjustment factor of 3.8%	20000	dollars	0.647	unilateral reduct			
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	59.459.73	Dollars
Factors	113579 dollars			0.647	unilateral reduct			

0.80913 [SYS 061400] .80704 - System

Line Item MTNHIDS503B18 - Nuclear Accident Dosimetry

BOE

BOE Type HC

Source of Data:

Item Desc: Nuclear Accident Dosimetry

Line Item Scope
The nuclear accident dosimetry (NAD) system is maintained operational at all times. This task includes the time to maintain, operate, and calibrate the NAD equipment. Energy calibrations and equipment QA source checks are performed weekly. A complete system calibration is performed semi-annually.

Breakdown of Historical Cost Data:
Item: Nuclear Accident Dosimetry
Units: 1 lot
Unit Cost: 150 hours

Labor:
750: R632S [P080] 150 hours
Weekly equipment calibration (52 wk. x 2 hr./wk) 104 hr./y
Semi Annual calibration (2 cal x 23 hr./cal) 46 hr./y

Non-Labor:

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	97.05	Hours
Factors	150 hours			0.647	unilateral reduct			

WBS No: 1HAJ20
Activity ID: 1HAJ200004

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Line Item MTNHIDS504B19 - External Dose Reconstruction

BOE	BOE Type HC					
	Source of Data:					
	Item Desc: External Dosimetry Dose Reconstructions					
	Line Item Scope Periodically, an employee's external dose cannot be determined through conventional methods. This may happen if the TLD fails, the reader malfunctions, or if the employee loses or damages the TLD. In this case, a dose reconstruction is necessary in order to determine a dose of record. The dose reconstruction process ranges from a simple one to a very complex reconstruction requiring several hours to complete. This task covers the costs necessary to perform the investigation and report generation required for dose reconstructions. It is anticipated that there will be 450 dose reconstructions that require a complete investigation in FY04, based on the actual number of dose reconstructions completed in FY99 and number of hours on average required per reconstruction.					
	Breakdown of Historical Cost Data: Item: External Dosimetry Dose Reconstructions Units: 1 lot Unit Cost: 1700 hours					
	Labor: 750: R632S [P080] 1700 hrs. Performance of Dose Reconstructions (450 x 3.78 hours each) = 1700 hr./yr.					
	Non-Labor: None required					
	Unit Cost Adjustment Factor: Revised Unit Cost: Basis for Adjustment:					

Resources		Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried		Linear		1.099.90	Hours
Factors		1700	hours	0.647	unilateral reduct					

Line Item MTNHIDS506B20 - External Dosimetry Program Admin

BOE	BOE Type HC					
	Source of Data:					
	Item Desc: External Dosimetry Program Admin					
	Line Item Scope This task provides for the administrative functions for the department including: maintenance of Dosimetry historical data; procedures review and revision; property inventory; Radiological Records support and QA checks; training; maintenance of the readers, glow curve boxes, calibration, heating adjustments of the readers; contract administration; contamination surveys; and management and secretarial support.					
	Breakdown of Historical Cost Data: Item: External Dosimetry Program Admin Units: 1 lot Unit Cost: 2,072 hours					
	Labor: 2,072 hours 750: K238S [M020] 616 hours. Provides management support and overview.					
	750: K238S [G010] 616 hours. Provides secretarial support.					
	750: R632S [E050] 150 hours. Provides administrative functions and procedure review/revision.					
	750: R632s [P080] 690 hours. Provides other Admin/Professional actives, program management, property inventory, Annual report review, Annual report card reviews, Data entry reviews and					

WBS No: 1HAJ20
Activity ID: 1HAJ200004

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general problem solving, maintenance support, program support, and training.

Non-Labor:
None required

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	97.05	Hours
Factors	150	hours			0.647 unilateral reduct			
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	398.55	Hours
Factors	616	hours			0.647 unilateral reduct			
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	398.55	Hours
Factors	616	hours			0.647 unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	446.43	Hours
Factors	690	hours			0.647 unilateral reduct			

Line Item MTNHIDU501C26 - Radiological Records Files Maintenance

BOE

BOE Type HC

Source of Data:

Item Desc: Radiological Records Files Maintenance

Line Item Scope

The number of monitored radiation workers with radiation exposure files is based on FY00 levels of about 4,300. This budget assumes there will be no more than 4,300 radiation workers in FY04.

Specific tasks include data entry, records filing, archiving and retrieval from the Federal Records Center. There are projected to be about 450 dose reconstructions in FY 04, which must be reviewed, tracked, and posted separate from other dosimetry data, and filed in individual's exposure history files. Visitor reports for monitored visitors must be generated after each visit to the Site.

Breakdown of Historical Cost Data:

Item: File Maintenance

Units: 1 lot

Unit Cost: 1,867 hours

Labor:

750: R632S 1,850 hr. Based on 4,300 active radiation workers

[G010] Dose Reconstructions 250 hr.

[G010] HIS-20 Data Entry 550 hr.

[G010] Exposure Records filing: 550 hr.

[G010] Visitor dosimetry program 250 hr.

[G010] HIS-20 Help desk suppor 250 hr.

751: R632S 17 hr. Based on 4,300 active radiation workers

[G010] Overtime support OT for archivin 17 hr./yr.

Non labor:

None required

Unit Cost Adjustment Factor:

Revised Unit Cost:

Basis for Adjustment

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	1,196.95	Hours
Factors	1850	hours			0.647 unilateral reduct			
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	11.00	Hours
Factors	17	hours			0.647 unilateral reduct			
A55	SOURCE ONE	0000	NONE	K238S	Radiation Protection	Linear	1,682.20	Dollars
Factors	40	BOXES	65	DOLLARS	0.647 unilateral reduct			

WBS No: 1HAJ20
Activity ID: 1HAJ200004

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Line Item MTNHIDU502C27 - Annual Report to DOE

BOE

BOE Type HC

Source of Data:

Item Desc: Annual Report to DOE

Line Item Scope
An annual report of all occupational radiation exposure is required to be prepared and delivered to the DOE by March 31, 2004. The report is automatically generated from the Records computer system (HIS-20).

Specific tasks include; report generation, QC review for data quality to ensure results are generated as entered into the databases, QC review for format, demographic data manipulation (editing and verification), dose reconstruction data correction, and distribution of the report.

Breakdown of Historical Cost Data:
Item:
Units: 1 lot
Unit Cost: 686 hrs
Labor:
750: 618 hours
751: 68 hrs.

Non-labor:
None required

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	399.85	Hours
Factors	618 hours				0.647 unilateral reduct			
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	44.00	Hours
Factors	68 hours				0.647 unilateral reduct			

Line Item MTNHIDU503C28 - Annual Exposure Report Cards to Individuals

BOE

Source of Data:

BOE Type HC

Item Desc: Annual Exposure Report Cards to Individuals

Line Item Scope
Annual Occupational Radiation Exposure Reports (report cards) are printed for all monitored employees for the previous calendar year's exposure. Duplicate report cards are printed to provide individuals personal copy and record file copy. The report cards are distributed through U.S. Mail. This budget assumes there will be no more than 4,300 radiation workers in FY04 requiring report cards.

Specific tasks are; data quality assurance verification performed on report cards to ensure doses reported match the Annual Report and the database, updating the mailing list, folding reports, inserting them into envelopes, addressing reports, and mailing them, and filing record file copy of the report card.

Breakdown of Historical Cost Data:
Item: Exposure Report Cards
Units: 1 lot
Unit Cost: 626 hrs
Labor:
[750] 617 hrs
[751] 9 hrs

Non-labor:
None required:

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

WBS No: 1HAJ20
Activity ID: 1HAJ200004

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
WBS Filter
Activity Filter
Baseline Devl
1HAJ
*

Starts In FY *

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	399.20	Hours
	Factors	617	hours			0.647	unilateral reduct		
	751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	5.82	Hours
	Factors	9	hours			0.647	unilateral reduct		

Line Item MTNHIDU504C29 - Other Required Reports

BOE	BOE Type HC
Source of Data:	
Item Desc: Other Required Reports	
Line Item Scope	
Several other types of reports are required to be provided to individuals, Radiological Protection, DOE, or to line management. Some of the reports are routinely scheduled such as quarterly high-to-low exposure reports. Others are provided as requested such as Freedom of Information (FOIA) or legal requests. The number of reports requested and the time required to produce them is based on experience and assuming 4,300 radiation workers.	
Employees may request copies of their radiation exposure files whenever they want. In addition, terminating employees, former employees or legal representation may request file copies. Historically, approximately 60 file copies are requested per year. These must be photocopied, assembled, inventoried, and issued. Computer generated summary reports are also provided to visitors or terminating employees who request them. This activity also supports requesting radiation dose history from former employers of new radiation workers, and providing exposure histories to other facilities when requested.	
Dose reports organized from highest exposure to lowest exposure are provided to management and Radiological Control. These may be routine quarterly ALARA Reports (high-to-low) or non-routine ALARA reports. Routine reports must be generated, sorted and distributed. Non-routine reports may require sub-contractor time for programming support.	
Breakdown of Historical Cost Data:	
Item: Report preparation and distribution	
Units: 1 lot	
Unit Cost: 637 hrs	
Labor:	
[750]: 617 hrs	
[751]: 20 hrs.	
Non-labor:	
None required	
Unit Cost Adjustment Factor:	
Revised Unit Cost:	
Basis for Adjustment	

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	399.20	Hours
	Factors	617	hours			0.647	unilateral reduct		
	751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	12.94	Hours
	Factors	20	hours			0.647	unilateral reduct		

Line Item MTNHIDU505C30 - Radiological Records Program Admin

BOE	BOE Type HC
Source of Data:	
Item Desc: Radiological Records Program Admin	
Line Item Scope	
This task conducts the management and administrative aspects of a functional Radiological Records program. Specific tasks include setting daily assignments, monitoring performance, conducting performance reviews, budget, property management, staff meetings and communications, customer interface, and administrative functions. The estimates are based on experience in FY99 and judgment.	
Breakdown of Historical Cost Data:	
Item: Radiological Records Program Admin	
Units: 1 lot	
Unit Cost: 3104 hrs, ASC supplies \$10,000	

WBS No: 1HAJ20
Activity ID: 1HAJ200004

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Labor:
[750]: 3,084 hours
[751]: 20 hours
Non-labor:
[A5C]: \$10,000
Supplies (paper, envelopes, files, fire kings, toner, folders, rubber stamps, labels, etc.)

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	398.55	Hours
Factors	616	hours			0.647	unilateral reduct			
750	STRAIGHT TIME BASE		M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	398.55	Hours
Factors	616	hours			0.647	unilateral reduct			
750	STRAIGHT TIME BASE		P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1,196.95	Hours
Factors	1850	Hours			0.647	unilateral reduct			
751	OVERTIME BASE & PRE.		G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	12.94	Hours
Factors	20	hours			0.647	unilateral reduct			
A5C	SUPPLIES		0000	NONE	R100S	RMRS Salaried	Linear	6,715.86	Dollars
Factors	1.038	use tax adder	10000	dollars	0.647	unilateral reduct			

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	42,965.75	Dollars
	Factors		42965.8 Dollars							
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	88,721.98	Dollars
	Factors		88722 Dollars							

Activity ID: 1HAJ200005 Description: Radiological Health FY05

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDS501B21	Routine Whole Body Dosimetry	1.00	each	HC	3.700	3.700	95,127	25,228	0	120,355	33,104	153,460
MTNHIDU501C32	Radiological Records Files Maintenance	1.00	ea	HC	1.850	1.850	48,525	44,200	0	92,726	16,887	109,612
MTNHIDU505C36	Radiological Records Program Admin	1.00	each	HC	1.850	1.850	30,729	2,068	0	32,796	10,694	43,490
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	163,578	163,578	0	163,578
Total for Activity 1HAJ200005:						7.400	174,381	71,496	163,578	409,455	60,685	470,139

Line Item MTNHIDS501B21 - Routine Whole Body Dosimetry

BOE	
BOE Type HC	
Source of Data:	
Item Desc: Dosimetry Exchanges	
Line Item Scope The routine dosimetry task was broken down into sub-tasks required to complete the task. The time estimates required for External Dosimetry to perform each sub-task are based on experience and judgment gained in FY98 and FY99. No actual time studies were performed. Non-labor dollar estimates are based on FY98 and FY99 actuals, or using current vendor catalogs.	
In FY 99, there were approximately 4300 radiation workers who exchanged dosimeters on a quarterly (some monthly) basis. The number of monitored individuals is similar thus far in FY00. This budget assumes there will be 4300 radiation workers in FY04. In addition, External Dosimetry anticipates providing 1000 Visitor dosimeters during FY04, based on the number of dosimeters issued from January 1999 to January 2000. Additional dosimeters are issued for special studies, multiple dosimeters, etc. The annual throughput expected in FY04 is 20,000 dosimeters handled per year (5,000 x 4 quarters = 20,000). Element Correction Factors (ECFs) are determined once/year for each TLD, and require additional processing.	
Breakdown of Historical Cost Data: Item: Whole body, extremity and area TLD exchanges. Units: 1 lot	

WBS No: 1HAJ20
Activity ID: 1HAJ200005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Unit Cost: 9,476 hours
\$133,579

Labor: 9,476 hours
750: R632S [KH10H] 7,400 hrs.
To perform routine TLD exchanges based on FY99 experience, process routine TLD's, ECF the TLD population, Issue new and non-routine dosimetry from building 112, and process non-routine (monthly and terminating employees) on an as needed basis.

750: R632S [P080] 1776 hrs./yr.Reviewing final dose processing results, set up of the dose reconstruction files, reader maintenance and calibrations, DOELAP preparation and testing, file maintenance, dose studies, dose investigations, and ECF generation.

751: R632S [KH10H] 300 hrs./yr.
To perform four off-shift (AWS days) quarterly exchanges. Exchanges performed off-shifts since most dosimeters are on the storage board at that time, and to minimize impact on projects.

Non-Labor:
A5C: \$20,000
Lab supplies - Computer/Printer upgrades, film, ID Cards, Laminate Coverings, paper, labels, printer ribbons, etc. \$20,000

A5H \$113,579
Stanford Dosimetry for technical and algorithm support \$10,000
Alpha group for the daily cleaning and minor maintenance of the Panasonic TLD readers \$9,844
Digital Equipment support for Computers and Printers \$2,985
Panasonic maintenance contract on three readers \$16,200
Panasonic maintenance contract on TLD badge exchanger \$6,750
Battelle irradiation contract - Calibration Services for the Panasonic readers \$50,000
Antech Service Contract for the WE Irradiator \$9,800
RGSC External Dosimetry software maintenance \$8,000

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	1.850.00	Hours
	Factors	1850 hours							
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.850.00	Hours
	Factors	1850 hours							
	A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	5.000.00	Dollars
	Factors	5000 Dollars							
	A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	20.228.36	Dollars
	Factors	25000 dollars							

0.80913 [SYS 061400] .80704 - System

Line Item MTNHIDU501C32 - Radiological Records Files Maintenance

BOE	BOE Type HC
	Source of Data:
	Item Desc: Radiological Records Files Maintenance
	Line Item Scope The number of monitored radiation workers with radiation exposure files is based on FY00 levels of about 4,300. This budget assumes there will be no more than 4,300 radiation workers in FY04.
	Specific tasks include data entry, records filing, archiving and retrieval from the Federal Records Center. There are projected to be about 450 dose reconstructions in FY 04, which must be reviewed, tracked, and posted separate from other dosimetry data, and filed in individual's exposure history files. Visitor reports for monitored visitors must be generated after each visit to the Site.

WBS No: 1HAJ20
Activity ID: 1HAJ200005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Breakdown of Historical Cost Data:
Item: File Maintenance
Units: 1 lot
Unit Cost: 1,867 hours

Labor:
750: R632S 1,850 hr. Based on 4,300 active radiation workers
[G010] Dose Reconstructions 250 hr.
[G010] HIS-20 Data Entry 550 hr.
[G010] Exposure Records filing: 550 hr.
[G010] Visitor dosimetry program 250 hr.
[G010] HIS-20 Help desk suppor 250 hr.
751: R632S 17 hr. Based on 4,300 active radiation workers
[G010] Overtime support OT for archivin 17 hr./yr.

Non labor:
None required
Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1.850.00	Hours
Factors 1850 hours								
A55	SOURCE ONE	0000	NONE	K238S	Radiation Protection	Linear	44.200.00	Dollars
Factors 680 boxes 65 dollars								

Line Item MTNHIDU505C36 - Radiological Records Program Admin

BOE

BOE Type HC

Source of Data:

Item Desc: Radiological Records Program Admin

Line Item Scope
This task conducts the management and administrative aspects of a functional Radiological Records program. Specific tasks include setting daily assignments, monitoring performance, conducting performance reviews, budget, property management, staff meetings and communications, customer interface, and administrative functions. The estimates are based on experience in FY99 and judgment.

Breakdown of Historical Cost Data:
Item: Radiological Records Program Admin
Units: 1 lot
Unit Cost: 3104 hrs, A5C supplies \$10,000

Labor:
[750]: 3,084 hours
[751]: 20 hours
Non-labor:
[A5C]: \$10,000
Supplies (paper, envelopes, files, fire kings, toner, folders, rubber stamps, labels, etc.)

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	1.850.00	Hours
Factors 1850 hours								
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	2.067.60	Dollars
Factors 2000 dollars 1.0338 use tax								

Line Item SYS - Contingency And Escalation

BOE

WBS No: 1HAJ20
Activity ID: 1HAJ200005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	116.086.70	Dollars
Factors 116087 Dollars									
ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	47.491.13	Dollars
Factors 47491.1 Dollars									

Activity ID: 1HAJ200006 Description: Rad Records File Maintenance

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100		1.00	each		430	430	7.142	0	0	7.142	8.892	16.035
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	6.294	6.294	0	6.294
Total for Activity 1HAJ200006:						430	7.142	0	6.294	13.437	8.892	22.329

Line Item 100 -

BOE	<p>BOE Type HC</p> <p>Source of Data:</p> <p>Item Desc: Radiological Records Files Maintenance</p> <p>Line Item Scope</p> <p>The number of monitored radiation workers with radiation exposure files is based on FY00 levels of about 4,300. This budget assumes there will be no more than 4,300 radiation workers in FY04.</p> <p>Specific tasks include data entry, records filing, archiving and retrieval from the Federal Records Center. There are projected to be about 450 dose reconstructions in FY 04, which must be reviewed, tracked, and posted separate from other dosimetry data, and filed in individual's exposure history files. Visitor reports for monitored visitors must be generated after each visit to the Site.</p> <p>Breakdown of Historical Cost Data:</p> <p>Item: File Maintenance</p> <p>Units: 1 lot</p> <p>Unit Cost: 1,867 hours</p> <p>Labor:</p> <p>750: R632S 1,850 hr. Based on 4,300 active radiation workers</p> <p>[G010] Dose Reconstructions 250 hr.</p> <p>[G010] HIS-20 Data Entry 550 hr.</p> <p>[G010] Exposure Records filing: 550 hr.</p> <p>[G010] Visitor dosimetry program 250 hr.</p> <p>[G010] HIS-20 Help desk suppor 250 hr.</p> <p>751: R632S 17 hr. Based on 4,300 active radiation workers</p> <p>[G010] Overtime support OT for archivin 17 hr./yr.</p> <p>Non labor:</p> <p>None required</p> <p>Unit Cost Adjustment Factor:</p> <p>Revised Unit Cost:</p> <p>Basis for Adjustment</p>
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Resources		Cost Element	Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	430.00	Hours
Factors 430 hours									

Line Item SYS - Contingency And Escalation

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	3.303.42	Dollars
	Factors 3303.42 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	2.990.95	Dollars
	Factors 2990.95 Dollars									

Activity ID: 1HAJ2000P2 Description: Radiological Health FY00

Cost Risk 2 Schedule Risk 1

WBS No: 1HAJ20
Activity ID: 1HAJ2000P2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
HIS-20C1	HIS-20	1.00	each	HC	0	0	0	63.331	0	63.331	0	63.331
MTNHIDN501	Bioassav Sampling	1.00	ea	HC	1.026	1.026	39.520	1.875	0	41.395	19.286	60.680
MTNHIDN502	In-Vivo Counting	1.00	ea	HC	953	953	26.635	21.281	0	47.916	12.998	60.913
MTNHIDN503	Intake & Dose Assessment	1.00	ea	HC	721	721	25.961	27.915	0	53.876	12.669	66.545
MTNHIDN504	Internal Dosimetrv Program Admin	1.00	ea	HC	936	936	26.871	6.100	0	32.971	13.113	46.084
MTNHIDS501B1	Routine Whole Body Dosimetrv	1.00	each	HC	5.718	5.718	125.974	102.154	0	228.127	61.475	289.603
MTNHIDS503B2	Nuclear Accident Dosimetrv	1.00	each	HC	349	349	11.529	2.061	0	13.590	5.626	19.217
MTNHIDS504B3	External Dose Reconstruction	1.00	each	HC	148	148	4.893	24.547	0	29.441	2.388	31.829
MTNHIDS506B4	External Dosimetrv Program Admin	1.00	each	HC	1.656	1.656	61.192	28.003	0	89.195	29.862	119.056
MTNHIDU501C2	Radiological Records Files Maintenance	1.00	ea	HC	607	607	15.949	27.493	0	43.442	7.783	51.225
MTNHIDU502C3	Annual Report to DOE	1.00	ea	HC	271	271	7.189	0	0	7.189	3.508	10.697
MTNHIDU503C4	Annual Exposure Report Cards to Individuals	1.00	ea	HC	334	334	8.762	0	0	8.762	4.276	13.039
MTNHIDU504C5	Other Required Reports	1.00	ea	HC	563	563	14.787	0	0	14.787	7.216	22.003
MTNHIDU505C6	Radiological Records Program Admin	1.00	each	HC	1.033	1.033	47.994	5.042	0	53.037	23.421	76.458
Total for Activity 1HAJ2000P2:						14.314	417.257	309.802	0	727.059	203.622	930.681

Line Item HIS-20C1 - HIS-20

BOE	Source of Data: FY98 data from WAD 046 historical FY98 reports, 110804070103 and 1108040704 charge number NH7300M1, (Oct. 97 to Sept 98). Actuals for labor (0750 and 0751) and ODC-400aa report for non-labor. Item Desc: HIS-20 Access Control System Support Breakdown of Historical Cost Data: Item: HIS-20 Support Units: 1 lot Unit Cost: 4,235 hours, \$221,370 in ODCs: \$6,670 subcontracted services, \$6,503 training/travel, \$208,197 supplies. Unit Cost Adjustment Factor: -4,235 hrs/- \$46,050/-21% other direct costs. Revised Unit Cost: 0 hours, \$175,320 other direct costs. Basis for Adjustment: Software Engineer 4 Database support (KH Team support) is now being subcontracted. Database management by Software Engineer 4 (\$57,616). Software Engineer support was provided by DynCorp using Radiological Records charge number NH721500 in FY98. In FY99, the same support is provided by DynCorp I&ET as a sub-contract for \$57,616. Canberra support (\$37,695). The Canberra support contract (\$37,695) is based on FY99 contract number RM907357AS. Anticipated Canberra software modifications (4 @ \$3,500 = \$14,000). The department anticipates making four software modification requests from Canberra in FY99 at approximately \$3,500 each, based on FY98 Purchase Requisition P425963 for the Access Control Patch. ORACLE license (\$60,285). The Oracle license is for the third year of a three year contract. Five-day travel (\$1,311) for one to HIS-20 Users Group meeting in Meridan, CT per quote from RMRS Corporate Travel on 3/1/99, a copy of which is in the Activity Manager's file(\$511 airfare, \$540 hotel/perdiem, \$260 rental car). The HIS-20 Users group is a new requirement since this is the first year of full operation of the database. \$4,413 Oracle Database Training for HIS-20 (2 local classes).
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Resources		Cost Element		Skill		Department		Curve	Quantity	Units
		A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	61.263.75	Dollars
		Factors 169596 dollars		0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Max Earned Value Factor			
		A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	2.067.70	Dollars
		Factors 5724 dollars		0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Max Earned Value Factor			

Line Item MTNHIDN501 - Bioassay Sampling

BOE	Source of Data: FY98 data from WAD 046 historical FY98 reports (Oct. 97 to Sept 98), 110804070101. Actuals for labor (0750 and 0751) and ODC-400aa report for non-labor. NH720501 and NH7205A1. Item Desc: Bioassay Sampling Breakdown of Historical Cost Data: Item: Routine and Special Bioassay Sampling Units: 1 lot Unit Cost: 2,840 hours, \$24,041 Supplies Unit Cost Adjustment Factor: -\$18,886/-78%, which includes 3.8% use tax, on supplies Revised Unit Cost: 2,840 hours, \$5,155 Supplies (Bioassay sample kits, cards and miscellaneous sampling supplies.
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WBS No: 1HAJ20
Activity ID: 1HAJ2000P2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Basis For Adjustment: Use tax was previously paid by an indirect activity. Urine kits budgeted in Analytical Labs.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	351.48	Hours
Factors	973 hours		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	446.85	Hours
Factors	1237 hours		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	227.58	Hours
Factors	630 hours		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	1,874.80	Dollars
Factors	5000 dollars		1.038 use tax		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor	

Line Item MTNHIDN502 - In-Vivo Counting

BOE

Source of Data: FY98 data from WAD 046 historical FY98 reports (Oct. 97 to Sept 98), 110804070101. Actuals for labor (0750 and 0751) and ODC-400aa report for non-labor. NH720502 and NH7205A2; NH7205A4 for Canberra.

Item Desc: In-vivo Counting

Breakdown of Historical Cost Data:
Item: Lung and wound counts
Units: 1 lot

Unit Cost: 3,069 hours to Schedule, perform and review lung counts, perform and review wound counts, wound counter maintenance, tracking trending (KH Team support). \$12,351 Supplies: Coveralls, Paper Clothing, Booties, one germanium detector repair by EG&G Ortec, liquid nitrogen, sticky mats and wound counter. \$140 Travel for one to DOE Lung count conference. \$0 Alpha support for wound counter calibration and detector repair.

Unit Cost Adjustment Factor: -430 (-14%)hours; \$79,030/+633% Other Direct Costs

Revised Unit Cost: 2,639 hours, \$91,521 Other Direct Costs

Basis For Adjustment: Hours were moved to MTNHIDS501 - Routine Whole Body Dosimetry; \$22,556 supplies: \$5,000 for a germanium detector repair and \$2,379 for a new wound counter which were charged to NH7205A4 instead of NH7205A2, and additional \$2,000 for an estimated increase in liquid nitrogen costs, with the balance to cover paper clothing & booties, sticky mats, and liquid nitrogen. Supply dollars in NH7205A4 is decreased by \$7,379. Supply dollars are burdened with a 3.8% use tax. Subcontracts are \$14,618 Alpha support for wound counter calibration and detector repair and \$52,575 subcontracted Lung Counter Maintenance. Costs for Alpha Group and Associates for wound count calibrations and detector repair were budgeted in the cost of the contract with Alpha in FY98, but are now budgeted here and in NH7206A1 (\$14,618 in each). Travel cost of \$1,772 if budgeted for the DOE lung count conference, which is usually held in the spring. DOE has not specified the time and location yet. There was no conference held in FY98, but there is expected to be one in FY00. The budget was based on travel to Charleston, SC, where the last lung count conference was held in 1997. Travel cost is based on quotes: airfare \$928, hotel/perdiem \$519.60, car rental \$325.00.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	249.97	Hours
Factors	692 hours		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	685.26	Hours
Factors	1897 hours		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor			
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	C100S	Closure Site Services	Linear	18.06	Hours
Factors	50 hours		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	11,248.81	Dollars
Factors	30000 Dollars		1.038 use tax adjustment factor of 3.8%		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor	
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	9,392.07	Dollars
Factors	26000 dollars		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor			
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	640.11	Dollars
Factors	1772 Dollars		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor			

Line Item MTNHIDN503 - Intake & Dose Assessment

BOE

Source of Data: FY98 data from WAD 046 historical FY98 reports (Oct. 97 to Sept 98), 110804070101. Actuals for labor (0750 and 0751) and ODC-400aa report for non-labor. NH720503 and NH7205A3.

Item Desc: Intake and Dose Assessment

Breakdown of Historical Cost Data:
Item: Intake and Dose assessments
Units: 1 lot

Unit Cost: 2,289 hours for Data compilation and review, assessment and modeling, data reporting, individual briefings, radiation worker support, assessment

WBS No: 1HAJ20
Activity ID: 1HAJ2000P2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

peer review (KH Team support), \$1,168 Subcontracts
Unit Cost Adjustment Factor: 1526 hours (+67%)
Revised Unit Cost: 3,815 hours, \$1,168 Subcontract dollars
Basis For Adjustment: Hours were moved from Internal Dosimetry Program Administration due to change of program emphasis and need. Subcontract for independent review of one case.

ACP 2000-5045:
Corrects one FTE from R632S/P080/0750 to R632S/P080/A5H (RMRS Corp).

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	108.37 Hours
Factors	300 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor		
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	603.26 Hours
Factors	1670 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor		
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	9.03 Hours
Factors	25 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor		
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	421.92 Dollars
Factors	1168 dollars		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor		
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	27,493.12 Dollars
Factors	1820 hours		41.8181 dollars per hour	0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor	

Line Item MTNHIDN504 - Internal Dosimetry Program Admin

BOE	Source of Data: FY98 data from WAD 046 historical FY98 reports (Oct. 97 to Sept 98), 110804070101. Actuals for labor (0750 and 0751) and ODC-400aa report for non-labor. NH720504 and NH7205A4. Item Desc: Internal Dosimetry Program Administration Breakdown of Historical Cost Data: Item: Program management, oversight and administration Units: 1 lot Unit Cost: 4152 hours, \$106,277 Other Direct Costs Unit Cost Adjustment Factor: -1,562/-37.6% hours, -\$88,354/-83% Other Direct Costs Revised Unit Cost: 2,590 hours; \$17,923 Other Direct Costs Basis For Adjustment: Hours moved to Intake & Dose Assessment due to program emphasis and need. The repair of a lung count detector (\$5,000) and the purchase of a wound counter (\$2,379) in FY98 were charged to NH7205A4 instead of NH7205A2. Supply dollars in this charge number are decreased by \$7,379 and NH7205A2 are increased by \$7,379 to accommodate this correction of cost. Lung counter maintenance has been relocated to In-Vivo Counting. Remaining supply dollars are for computer/printer upgrades, NCRP & ICRP publications, shipping charges, and repairs. The B&W health physicist sub-contract support used in FY98 will not be necessary in FY00. MACTEC support is not necessary in FY00. The time and location of the DOE sponsored Biassay Conference has not been established, so the travel budget for that item was based on FY98's conference in Charlston, South Carolina, and quoted at \$928 airfare, \$519.60 hotel/perdiem. Professional dues of \$325 are included here.
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	212.04 Hours
Factors	587 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor		
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	85.97 Hours
Factors	238 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor		
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	K238S	Radiation Protection	Linear	328.72 Hours
Factors	910 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor		
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	272.73 Hours
Factors	755 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor		
750	STRAIGHT TIME BASE	T060	D&D HAZ REDUC TECH / RISK RED	R100S	RMRS Salaried	Linear	36.12 Hours
Factors	100 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor		
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	5,459.42 Dollars
Factors	14560 dollars		1.038 use tax	0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor	
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	640.11 Dollars
Factors	1772 dollars		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor		

Line Item MTNHIDS01B1 - Routine Whole Body Dosimetry

BOE	Source of Data: FY98 data from WAD 046 historical FY98 reports (Oct. 97 to Sept 98). Actuals for labor (0750 and 0751) and ODC-400aa report for non-labor.
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WBS No: 1HAJ20
Activity ID: 1HAJ2000P2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

NH7206A1, NH7206AI and NH7206A2.

Item Desc: Dosimeter Exchanges
Breakdown of Historical Cost Data:
Item: Whole body, extremity and area TLD exchanges
Units: 1 lot
Unit Cost: 14,593 hours, \$202,716 Other Direct Costs
Unit Cost Adjustment Factor: 1,237 (+8.5%)hours, \$30,770 (+15%) Other Direct Costs
Revised Unit Cost: 15,830 hours, \$233,486 Other Direct Costs

Basis For Adjustment: Hours adjusted upwards to cover L/L time elements previously covered by L/L Overhead and to cover the increased work scope. Supply dollars reduced due to reduction in TLD Holders ordered (\$143K). Subcontract dollars include Batelle for radiation for calibration at \$50K, Stanford Dosimetry for independent dosimetry expertise at \$40K and \$300 for freight charges.

FCP CLB-8077, Dec99: A5H - Reduce the excess IWO accrual for FY99 (-\$36K).

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	344.62	Hours
Factors	954 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I (CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	3,944.67	Hours
Factors	10920 hrs		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	657.44	Hours
Factors	1820 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	641.55	Hours
Factors	1776 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
751	OVERTIME BASE & PRE.	L050	MISSION SUP SPEC I (CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	108.37	Hours
Factors	300 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	R100S	RMRS Salaried	Linear	21.67	Hours
Factors	60 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
A5C	SUPPLIES	0000	NONE	K238S	Radiation Protection	Linear	79.901.00	Dollars
Factors	79901 dollars		eov adjustment					
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	22.252.55	Dollars
Factors	40000 Dollars		1.038 use tax adjustment factor of 3.8%	0.53595	--- FY00 May Earned Value Factor			

Line Item MTNHIDS503B2 - Nuclear Accident Dosimetry

BOE

Source of Data: FY98 data from WAD 046 historical FY98 reports (Oct. 97 to Sept 98). Actuals for labor (0750 and 0751) and ODC-400aa report for non-labor. NH7206A3

Item Desc: Nuclear Accident Dosimetry
Breakdown of Historical Cost Data:
Item: Nuclear accident dosimetry
Units: 1 lot
Unit Cost: 966 hours, \$3,141 Other Direct Costs
Unit Cost Adjustment Factor: \$5,565/+177%
Revised Unit Cost: 966 hours, \$8,706 Other Direct Costs

Basis For Adjustment: Overtime is not anticipated for this activity in FY00. Supplies dollars are for the FNAD counting system detector replacement. Dollars for A58 were combined from NH7206A3, NH720600, NH7206A1 and NH7206A6 and are used for the FNAD counting. Travel is budgeted for two health physicists to travel to Los Alamos, NM to test the nuclear accident dosimeters, pending availability of the reactor and scheduling by Los Alamos. The trips are estimated at \$1500 each based on historical costs. Time is not yet specified.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	348.95	Hours
Factors	966 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
A58	ASI	0000	NONE	R100S	RMRS Salaried	Linear	22.76	Dollars
Factors	63 dollars		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	2,038.28	Dollars
Factors	5436 dollars		1.038 use tax adjustment factor of 3.8%	0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor		

Line Item MTNHIDS504B3 - External Dose Reconstruction

BOE

Source of Data: FY98 data from WAD 046 historical FY98 reports (Oct. 97 to Sept 98). Actuals for labor (0750 and 0751) and ODC-400aa report for non-labor.

WBS No: 1HAJ20
Activity ID: 1HAJ2000P2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

NH7206A4.

Item Desc: Dose Reconstructions
Breakdown of Historical Cost Data:
Item: Dose Reconstructions
Units: 1 lot
Unit Cost: 2,035 hours
Unit Cost Adjustment Factor: N/A
Revised Unit Cost: N/A
Basis For Adjustment: N/A

ACP 2000-5045:
Convert 1625 hours of R632S/P080/0750 to R632S/P080/A5H (RMRS Corp).

Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	148.11	Hours
Factors	410	hours	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor		
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	24.547.43	Dollars
Factors	1625	hours	41.8181	dollars per hour	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor

Line Item MTNHIDS506B4 - External Dosimetry Program Admin

BOE	Source of Data: FY98 data from WAD 046 historical FY98 reports (Oct. 97 to Sept 98). Actuals for labor (0750 and 0751) and ODC-400aa report for non-labor. NH7206A5 and NH7206A6. Item Desc: External Dosimetry Program Administration Breakdown of Historical Cost Data: Item: Program management, oversight and administration Units: 1 lot Unit Cost: 4,944 hours, \$132,205 Other Direct Costs Unit Cost Adjustment Factor: -361 hours/-7%, -\$44,508/-34% Other Direct Costs Revised Unit Cost: 4,583 hours, \$87,697 Other Direct Costs Basis For Adjustment: Hours changed due to changes in the program emphasis and resource needs. Supply dollars cover drinking water and miscellaneous RAD Health supplies. Dollars for A5C and ISS are combined under supplies. The contracts with Digital and UDMS will not be necessary due to new computer equipment procured in FY99. Costs for Alpha Group and Associates for wound count calibrations and detector repair were budgeted in the cost of the contract with Alpha in FY98, but are now budgeted here and in NH7205A2 (\$14,618 in each); \$68.8K for training contract and maintenance & software contracts.							
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Resources		Cost Element	Skill	Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	312.83	Hours
Factors	866	hours	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor		
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	219.27	Hours
Factors	607	hours	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor		
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K238S	Radiation Protection	Linear	219.27	Hours
Factors	607	hours	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor		
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	328.72	Hours
Factors	910	hours	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor		
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	351.12	Hours
Factors	972	hours	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor		
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	224.33	Hours
Factors	621	hours	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor		
A5C	SUPPLIES	0000	NONE	K218S	Financial Services	Linear	1.542.21	Dollars
Factors	4113	dollars	1.038	use tax	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	26.460.35	Dollars
Factors	73250	dollars	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor		

Line Item MTNHIDU501C2 - Radiological Records Files Maintenance

BOE	Source of Data: FY98 data from WAD 046 historical FY98 reports, 110804070103, (Oct. 97 to Sept 98). Labor actuals for labor (0750 and 0751) and ODC-400aa report for non-labor. Item Desc: Radiological Records File Maintenance							
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WBS No: 1HAJ20
Activity ID: 1HAJ2000P2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Breakdown of Historical Cost Data:
Item: File Maintenance
Units: 1 lot
Unit Cost: 3,751 hours (0750 and 0751)
Unit Cost Adjustment Factor: N/A
Revised Unit Cost: N/A
Basis for Adjustment: N/A

ACP 2000-5045:
Convert 1 FTE from R632S/P170/0750 to R632S/P170/A5H (Arcadia)

FCP 2000-8077 (Dec99) to return excess funds from labor rate deviation to MR (-250 hours/- \$10K).

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	601.06	Hours
Factors 1663.9 hours 0.67401 January 2000 Earned Value Factor 0.53595 --- FY00 May Earned Value Factor									
Resources	751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	6.14	Hours
	Factors 17 hours 0.67401 January 2000 Earned Value Factor 0.53595 --- FY00 May Earned Value Factor								
Resources	A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	27.493.12	Dollars
	Factors 1820 hours 41.8181 \$/hr 0.67401 January 2000 Earned Value Factor 0.53595 --- FY00 May Earned Value Factor								

Line Item MTNHIDU502C3 - Annual Report to DOE

BOE	Source of Data: FY98 data from WAD 046 historical FY98 reports, 1108040703, (Oct. 97 to Sept 98). Labor actuals for labor (0750 and 0751) and ODC-400aa report for non-labor.								
	Item Desc: Annual Report to DOE								
BOE	Breakdown of Historical Cost Data: Item: Annual Report Units: 1 Report Unit Cost: 850 hours (0750 and 0751) Unit Cost Adjustment Factor: N/A Revised Unit Cost: N/A Basis For Adjustment: N/A								
	FCP 2000-8077 (Dec99) to return excess funds from labor rate deviation to MR (-102 hours/- \$4K).								

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	245.57	Hours
Factors 679.82 hours 0.67401 January 2000 Earned Value Factor 0.53595 --- FY00 May Earned Value Factor									
Resources	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	0.54	Hours
	Factors 0.53595 --- FY00 May Earned Value Factor								
Resources	751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	24.56	Hours
	Factors 68 hours 0.67401 January 2000 Earned Value Factor 0.53595 --- FY00 May Earned Value Factor								

Line Item MTNHIDU503C4 - Annual Exposure Report Cards to Individuals

BOE	Source of Data: FY98 data from WAD 046 historical FY98 reports, 1108040702, (Oct. 97 to Sept 98). Labor actuals for labor (0750 and 0751) and ODC-400aa report for non-labor.								
	Item Desc: Annual Exposure Report Cards to Individuals								
BOE	Breakdown of Historical Cost Data: Item: Exposure Report Cards Units: 1 lot Unit Cost: 1,061 hours (0750 and 0751) Unit Cost Adjustment Factor: N/A Revised Unit Cost: N/A Basis for Adjustment: N/A								
	FCP 2000-8077 (Dec99) to return excess funds from labor rate deviation to MR (-137 hours/- \$6K).								

Resources	Cost Element		Skill	Department	Curve	Quantity	Units

WBS No: 1HAJ20
Activity ID: 1HAJ2000P2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	330.36	Hours
Factors	914.54 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor			
751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	3.25	Hours
Factors	9 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor			

Line Item MTNHIDU504C5 - Other Required Reports

BOE	Source of Data: FY98 data from WAD 046 historical FY98 reports, 1108040702, (Oct. 97 to Sept 98). Labor actuals for labor (0750 and 0751) and ODC-400aa report for non-labor. Item Desc: Other Required Reports Breakdown of Historical Cost Data: Item: Report preparation and distribution Units: 1 lot Unit Cost: 1,769 hours Unit Cost Adjustment Factor: 20 hours/+1% Revised Unit Cost: 1,789 hours Basis For Adjustment: Requests for special reports are expected to increase with the change in the Administrative Control Levels. Overtime will be required to produce the queries and to distribute the reports. FCP 2000-8077 (Dec99) to return excess funds from labor rate deviation to MR (-231 hours/- \$10K).							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	555.52	Hours
	Factors	1537.85 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor			
	751	OVERTIME BASE & PRE.	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	7.22	Hours
	Factors	20 hours		0.67401 January 2000 Earned Value Factor	0.53595	--- FY00 Mav Earned Value Factor			

Line Item MTNHIDU505C6 - Radiological Records Program Admin

BOE	Source of Data: FY98 data from WAD 046 historical FY98 reports, 110804070103, (Oct. 97 to Sept 98). Labor actuals for labor (0750 and 0751) and ODC-400aa report for non-labor. Item Desc: Radiological Records Program Administration Breakdown of Historical Cost Data: Item: Program Administration Units: 1 lot Unit Cost: 3,268 hours (0750 and 0751), \$13,448 Other Direct Costs Unit Cost Adjustment Factor: +19 hours/+0.5%, +\$511/3.8% Other Direct Costs Revised Unit Cost: 3,287 hours, \$13,959 Other Direct Costs Basis for Adjustment: Expect additional overtime required to archive records related to terminated employees or subcontractors. Use tax of 3.8% applied to supplies starting mid FY99. FCP 2000-8077 to reduce labor budget due to rate deviation between labor rate and actual labor. FCP 2000-8077 (Dec99) to return excess funds from labor rate deviation to MR (-427 hours/- \$18K).							
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	K238S	Radiation Protection	Linear	190.62	Hours
Factors	527.69	hours	0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor				
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K242S	Occup Safety & Indus Hygiene	Linear	835.33	Hours	
Factors	2312.43	hours	0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor				
751	OVERTIME BASE & PRE.	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	7.22	Hours	
Factors	20	hours	0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor				
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	5,041.34	Dollars	
Factors	13445	dollars	1.038 use tax adder		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor		
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	1.12	Dollars	
Factors	3	dollars	1.038 use tax adder on shipping		0.67401 January 2000 Earned Value Factor		0.53595 --- FY00 May Earned Value Factor		

Activity ID: 1HXXXJ2005 Description: Radiological Health FY06 Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
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WBS No: 1HAJ20
Activity ID: 1HXXXJ2005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ

			Type	Hours/Unit	Total	Total	Activity Filter	* Cost	& Escalation	Cost	Starts In FY	*
MTNHIDS501B21	Routine Whole Body Dosimetry	0.96	each	HC	3.700	3.570	91.789	24.343	0	116.132	31.943	148.075
MTNHIDU501C32	Radiological Records Files Maintenance	0.96	ea	HC	1.850	1.785	46.823	42.649	0	89.472	16.294	105.766
MTNHIDU505C36	Radiological Records Program Admin	0.96	each	HC	1.850	1.785	29.650	1.995	0	31.645	10.318	41.964
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	250.423	250.423	0	250.423
Total for Activity 1HXXXJ2005:					7.140	168.262	68.987	250.423	487.673	58.555	546.228	

Line Item MTNHIDS501B21 - Routine Whole Body Dosimetry

BOE

BOE Type HC

Source of Data:

Item Desc: Dosimetry Exchanges

Line Item Scope
The routine dosimetry task was broken down into sub-tasks required to complete the task. The time estimates required for External Dosimetry to perform each sub-task are based on experience and judgment gained in FY98 and FY99. No actual time studies were performed. Non-labor dollar estimates are based on FY98 and FY99 actuals, or using current vendor catalogs.

In FY 99, there were approximately 4300 radiation workers who exchanged dosimeters on a quarterly (some monthly) basis. The number of monitored individuals is similar thus far in FY00. This budget assumes there will be 4300 radiation workers in FY04. In addition, External Dosimetry anticipates providing 1000 Visitor dosimeters during FY04, based on the number of dosimeters issued from January 1999 to January 2000. Additional dosimeters are issued for special studies, multiple dosimeters, etc. The annual throughput expected in FY04 is 20,000 dosimeters handled per year (5,000 x 4 quarters = 20,000). Element Correction Factors (ECFs) are determined once/year for each TLD, and require additional processing.

Breakdown of Historical Cost Data:
Item: Whole body, extremity and area TLD exchanges.
Units: 1 lot
Unit Cost: 9,476 hours
\$133,579

Labor: 9,476 hours
750: R632S [KH10H] 7,400 hrs.
To perform routine TLD exchanges based on FY99 experience, process routine TLD's, ECF the TLD population, Issue new and non-routine dosimetry from building 112, and process non-routine (monthly and terminating employees) on an as needed basis.

750: R632S [P080] 1776 hrs./yr. Reviewing final dose processing results, set up of the dose reconstruction files, reader maintenance and calibrations, DOELAP preparation and testing, file maintenance, dose studies, dose investigations, and ECF generation.

751: R632S [KH10H] 300 hrs./yr.
To perform four off-shift (AWS days) quarterly exchanges. Exchanges performed off-shifts since most dosimeters are on the storage board at that time, and to minimize impact on projects.

Non-Labor:
A5C: \$20,000
Lab supplies - Computer/Printer upgrades, film, ID Cards, Laminate Coverings, paper, labels, printer ribbons, etc. \$20,000

A5H \$113,579
Stanford Dosimetry for technical and algorithm support \$10,000
Alpha group for the daily cleaning and minor maintenance of the Panasonic TLD readers \$9,844
Digital Equipment support for Computers and Printers \$2,985
Panasonic maintenance contract on three readers \$16,200
Panasonic maintenance contract on TLD badge exchanger \$6,750
Battelle irradiation contract - Calibration Services for the Panasonic readers \$50,000
Antech Service Contract for the WE Irradiator \$9,800
RGSC External Dosimetry software maintenance \$8,000

Unit Cost Adjustment Factor:
Revised Unit Cost:
Basis for Adjustment:

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1HAJ20
Activity ID: 1HXXXJ2005

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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	L050	MISSION SUP SPEC I /CBLFAB.DSP.	KH10H	EESH&Q Steelworkers	Linear	1.850.00	Hours
	Factors	1850	hours						
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.850.00	Hours
	Factors	1850	hours						
	A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	5.000.00	Dollars
	Factors	5000	Dollars						
	A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	20.228.36	Dollars
	Factors	25000	dollars						

0.80913 [SYS 061400] .80704 - System

Line Item MTNHIDU501C32 - Radiological Records Files Maintenance

BOE	BOE Type HC Source of Data: Item Desc: Radiological Records Files Maintenance Line Item Scope The number of monitored radiation workers with radiation exposure files is based on FY00 levels of about 4,300. This budget assumes there will be no more than 4,300 radiation workers in FY04. Specific tasks include data entry, records filing, archiving and retrieval from the Federal Records Center. There are projected to be about 450 dose reconstructions in FY 04, which must be reviewed, tracked, and posted separate from other dosimetry data, and filed in individual's exposure history files. Visitor reports for monitored visitors must be generated after each visit to the Site. Breakdown of Historical Cost Data: Item: File Maintenance Units: 1 lot Unit Cost: 1,867 hours Labor: 750: R632S 1,850 hr. Based on 4,300 active radiation workers [G010] Dose Reconstructions 250 hr. [G010] HIS-20 Data Entry 550 hr. [G010] Exposure Records filing: 550 hr. [G010] Visitor dosimetry program 250 hr. [G010] HIS-20 Help desk suppor 250 hr. 751: R632S 17 hr. Based on 4,300 active radiation workers [G010] Overtime support OT for archivin 17 hr./yr. Non labor: None required Unit Cost Adjustment Factor: Revised Unit Cost: Basis for Adjustment
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1.850.00	Hours
	Factors	1850	hours						
	A55	SOURCE ONE	0000	NONE	K238S	Radiation Protection	Linear	44.200.00	Dollars
	Factors	680	boxes	65	dollars				

Line Item MTNHIDU505C36 - Radiological Records Program Admin

BOE	BOE Type HC Source of Data: Item Desc: Radiological Records Program Admin Line Item Scope This task conducts the management and administrative aspects of a functional Radiological Records program. Specific tasks include setting daily assignments, monitoring performance, conducting performance reviews, budget, property management, staff meetings and communications, customer interface, and
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WBS No: 1HAJ20
Activity ID: 1HXXXJ2005

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administrative functions. The estimates are based on experience in FY99 and judgment.

Breakdown of Historical Cost Data:

Item: Radiological Records Program Admin

Units: 1 lot

Unit Cost: 3104 hrs, A5C supplies \$10,000

Labor:

[750]: 3,084 hours

[751]: 20 hours

Non-labor:

[A5C]: \$10,000

Supplies (paper, envelopes, files, fire kings, toner, folders, rubber stamps, labels, etc.)

Unit Cost Adjustment Factor:

Revised Unit Cost:

Basis for Adjustment

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	1,850.00	Hours
Factors 1850 hours								
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	2,067.60	Dollars
Factors 2000 dollars 1.0338 use tax								

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	184.443.60	Dollars
Factors 184444 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	65.979.34	Dollars
Factors 65979.3 Dollars								

WBS No: 1HAJ30 Title: Radiological Training

Activity ID: 1HAJ300001 Description: Radiological Training FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDA602	Radiological Training	1.00	ea	HC	14.940	14.940	427.836	452.858	0	880.694	204.078	1,084.771
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	57.385	57.385	0	57.385
Total for Activity 1HAJ300001:						14.940	427.836	452.858	57.385	938.078	204.078	1,142.156

Line Item MTNHIDA602 - Radiological Training

BOE

Line Item Scope: Clerical, organizational, communications, etc.

Source fo Data:FY99 Data

Request for additional detail should be addressed to the Activity manager R. Weedon or S. Pike

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	1,850.00	Hours
Factors 1850 hrs/wk								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	1,850.00	Hours
Factors 1850 hours								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1,850.00	Hours
Factors 1850 hours								
750	STRAIGHT TIME BASE	P150	TRAINERS	R100S	RMRS Salaried	Linear	7,540.00	Hours
Factors 7540 hours								
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1,850.00	Hours
Factors 1850 Hours								

WBS No: 1HAJ30
Activity ID: 1HAJ300001

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A5B	CONSTRUCTION	0000	NONE	C100S	Closure Site Services	Linear	50,000.00	Dollars
Factors	50000	Dollars						
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	3,114.00	Dollars
Factors	3000	dollars	1.038	sales tax				
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	63,837.00	Dollars
Factors	61500	dollars	1.038	sales tax				
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	23,464.89	Dollars
Factors	29000	dollars						
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	67,360.43	Dollars
Factors	45	dollars	1850	hours				
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	67,360.43	Dollars
Factors	45	Dollars	1850	hours				
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	67,360.43	Dollars
Factors	45	Dollars	1850	hours				
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	67,360.43	Dollars
Factors	45	hours	1850	hours				
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	18,000.00	Dollars
Factors	18000	Dollars						
A5R	MISC EXPENSES	0000	NONE	R100S	RMRS Salaried	Linear	25,000.00	Dollars
Factors	25000	dollars						

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	34,574.29	Dollars
	Factors 34574.3 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	22,810.31	Dollars
	Factors 22810.3 Dollars								

Activity ID: 1HAJ300002 Description: Radiological Training FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDA602	Radiological Training	1.00	ea	HC	11.240	11.240	335.299	371.719	0	707.018	118.361	825.378
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	123.046	123.046	0	123.046
Total for Activity 1HAJ300002:						11.240	335.299	371.719	123.046	830.064	118.361	948.424

Line Item MTNHIDA602 - Radiological Training

BOE

Line Item Scope: Clerical, organizational, communications, etc.

Source fo Data:FY99 Data

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	1,850.00	Hours
	Factors	1850	hrs/wk						
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried	Linear	1,850.00	Hours
	Factors	1850	hours						
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1,850.00	Hours
	Factors	1850	hours						
	750	STRAIGHT TIME BASE	P150	TRAINERS	R100S	RMRS Salaried	Linear	3,840.00	Hours
	Factors	3840	hours						

WBS No: 1HAJ30
Activity ID: 1HAJ300002

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750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1,850.00	Hours
Factors	1850	Hours						
A5B	CONSTRUCTION	0000	NONE	K238S	Radiation Protection	Linear	37,000.00	Dollars
Factors	37000	dollars						
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	63,837.00	Dollars
Factors	61500	dollars	1.038	sales tax				
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	2,335.50	Dollars
Factors	2250	dollars	1.038	sales tax				
A5H	SUBCONTRACTED SRVS	0000	NONE	K100S	Kaiser-Hill	Linear	23,464.89	Dollars
Factors	29000	dollars						
						0.80913 - [SYS 061400] .80704 - Svstem		
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	67,360.43	Dollars
Factors	1850	hours	45	dollars				
						0.80913 - [SYS 061400] .80704 - Svstem		
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	67,360.43	Dollars
Factors	1850	hours	45	dollars				
						0.80913 - [SYS 061400] .80704 - Svstem		
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	67,360.43	Dollars
Factors	1850	hours	45	dollars				
						0.80913 - [SYS 061400] .80704 - Svstem		
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	18,000.00	Dollars
Factors	18000	Dollars						
A5R	MISC EXPENSES	0000	NONE	R100S	RMRS Salaried	Linear	25,000.00	Dollars
Factors	25000	dollars						

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	ZDEPT	No Department	Linear	84,474.87
Factors	84474.9	Dollars			
ESC	ESCALATION	ZDEPT	No Department	Linear	38,571.11
Factors	38571.1	Dollars			

Activity ID: 1HAJ300003 Description: Radiological Training FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDA604	Radiological Training	1.00	ea	HC	7.565	7.565	225,656	124,667	0	350,323	78,077	428,400
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	118,475	118,475	0	118,475
Total for Activity 1HAJ300003:						7.565	225,656	124,667	118,475	468,799	78,077	546,876

Line Item MTNHIDA604 - Radiological Training

BOE

Line Item Scope: Clerical, organizational, communications, etc.

Source fo Data:FY99 Data

Request for additional detail should be addressed to the Activity manager R. Weedon or S. Pike

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried
Factors	1850	hrs/wk	0.673	unilateral reduct	
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	R100S	RMRS Salaried
Factors	1850	hours	0.673	unilateral reduct	
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried
Factors	1850	hours	0.673	unilateral reduct	

WBS No: 1HAJ30
Activity ID: 1HAJ300003

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750	STRAIGHT TIME BASE	P150	TRAINERS	R100S	RMRS Salaried	Linear	2,584.32	Hours
Factors	3840	hours			0.673 unilateral reduct			
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1,245.05	Hours
Factors	1850	Hours			0.673 unilateral reduct			
A5B	CONSTRUCTION	0000	NONE	C100S	Closure Site Services	Linear	33,650.00	Dollars
Factors	50000	Dollars			0.673 unilateral reduct			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	42,962.30	Dollars
Factors	61500	dollars	1.038 sales tax		0.673 unilateral reduct			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	1,571.79	Dollars
Factors	2250	dollars	1.038 sales tax		0.673 unilateral reduct			
A5H	SUBCONTRACTED SRVS	0000	NONE	K100S	Kaiser-Hill	Linear	32,672.84	Dollars
Factors	60000	dollars			0.673 unilateral reduct			
					0.80913 [SYS 061400] .80704 - Svstem			
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	4.53	Dollars
Factors	1850	hours	45 dollars		0.673 unilateral reduct	0.0001 FY00 adj up recon		
					0.80913 [SYS 061400] .80704 - Svstem			
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	4.53	Dollars
Factors	1850	hours	45 dollars		0.673 unilateral reduct	0.0001 FY00 adj up recon		
					0.80913 [SYS 061400] .80704 - Svstem			
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	4.53	Dollars
Factors	1850	hours	45 dollars		0.673 unilateral reduct	0.0001 FY00 adj up recon		
					0.80913 [SYS 061400] .80704 - Svstem			
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	12,114.00	Dollars
Factors	18000	Dollars			0.673 unilateral reduct			
A5R	MISC EXPENSES	0000	NONE	R100S	RMRS Salaried	Linear	1,682.50	Dollars
Factors	25000	dollars			0.673 unilateral reduct	0.1 FY00 adj up recon		

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	85,623.38	Dollars
Factors	85623.4	Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	32,851.98	Dollars
Factors	32852	Dollars						

Activity ID: 1HAJ300004 Description: Radiological Training FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDA604	Radiological Records	1.00	ea	HC	4.878	4.878	133,080	170,030	0	303,110	37,529	340,639
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	48,546	48,546	0	48,546
Total for Activity 1HAJ300004:						4.878	133,080	170,030	48,546	351,656	37,529	389,185

Line Item MTNHIDA604 - Radiological Records

BOE

Line Item: Manager duties and self assessment or monitoring
Source of Data: FY99 data
Request for additional detail should be address to the Activity manager R. Weedon or S. Pike
This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1,196.95	Hours
Factors	1850	hours			0.647 unilateral reduct			
750	STRAIGHT TIME BASE	P150	TRAINERS	R100S	RMRS Salaried	Linear	2,484.48	Hours
Factors	3840	hours			0.647 unilateral reduct			

WBS No: 1HAJ30
Activity ID: 1HAJ300004

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750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	R100S	RMRS Salaried	Linear	1.196.95	Hours
Factors	1850	Hours			0.647	unilateral reduct		
A5B	CONSTRUCTION	0000	NONE	C100S	Closure Site Services	Linear	32.350.00	Dollars
Factors	50000	Dollars			0.647	unilateral reduct		
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	26.863.44	Dollars
Factors	40000	dollars	1.038	sales tax	0.647	unilateral reduct		
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	1.007.38	Dollars
Factors	1500	dollars	1.038	sales tax	0.647	unilateral reduct		
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	43.582.20	Dollars
Factors	1850	hours	45	dollars	0.647	unilateral reduct		
						0.80913 [SYS 061400] .80704 - System		
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	43.582.20	Dollars
Factors	1850	hours	45	dollars	0.647	unilateral reduct		
						0.80913 [SYS 061400] .80704 - System		
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	6.470.00	Dollars
Factors	10000	Dollars			0.647	unilateral reduct		
A5R	MISC EXPENSES	0000	NONE	R100S	RMRS Salaried	Linear	16.175.00	Dollars
Factors	25000	dollars			0.647	unilateral reduct		

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	15.839.09	Dollars
Factors	15839.1 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	32.706.88	Dollars
Factors	32706.9 Dollars							

Activity ID: 1HAJ300005 Description: Radiological Training FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDD602	Radiological Records	1.00	each	HC	0	0	0	161.646	0	161.646	0	161.646
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	86.252	86.252	0	86.252
Total for Activity 1HAJ300005:						0	0	161.646	86.252	247.898	0	247.898

Line Item MTNHIDD602 - Radiological Records

BOE

Line Item: Manager duties and activities associated with final processing and/or archiving of radiological records.
Source of Data: FY99 data
Request for additional detail should be address to the Activity manager R. Weedon or S. Pike
This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
A55	SOURCE ONE		0000	NONE	K100S	Kaiser-Hill	Linear	975.00	Dollars
Factors	15	boxes	65		dollars				
A5C	SUPPLIES		0000	NONE	R100S	RMRS Salaried	Linear	25,950.00	Dollars
Factors	25000	Dollars	1.038		sales tax				
A5H	SUBCONTRACTED SRVS		0000	NONE	K100S	Kaiser-Hill	Linear	134,720.90	Dollars
Factors	45	Dollars	3700		hours				

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	61.210.99	Dollars
Factors 61211 Dollars									

WBS No: 1HAJ30
Activity ID: 1HAJ300005

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ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	25,041.45	Dollars
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Factors 25041.5 Dollars

Activity ID: 1HAJ3000P2 Description: Radiological Training FY00

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHDZZR	Radiological Training Supt	1.00	each	HC	5.398	5.398	154,577	377,127	0	531,703	75,433	607,137
Total for Activity 1HAJ3000P2:						5.398	154,577	377,127	0	531,703	75,433	607,137

Line Item MTNHDZZR - Radiological Training Supt

BOE

Line Item Scope: Clerical, organizational, communications, etc.

Source fo Data:FY99 Data

Request for additional detail should be addressed to the Activity manager R. Weedon or S. Pike

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	K238S Radiation Protection	Linear	668.27	Hours
Factors 1850 Hours	1 employee	0.674	0.53595 --- FY00 Mav Earned Value Factor		
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K238S Radiation Protection	Linear	668.27	Hours
Factors 1850 hours	1 employee	0.674	0.53595 --- FY00 Mav Earned Value Factor		
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	R100S RMRS Salaried	Linear	668.27	Hours
Factors 1850 Hours	1	0.674	0.53595 --- FY00 Mav Earned Value Factor		
750 STRAIGHT TIME BASE	P150 TRAINERS	R100S RMRS Salaried	Linear	2,673.09	Hours
Factors 1850 hours	4 employees	0.674	0.53595 --- FY00 Mav Earned Value Factor		
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	R100S RMRS Salaried	Linear	668.27	Hours
Factors 1850 Hours	1	0.674	0.53595 --- FY00 Mav Earned Value Factor		
751 OVERTIME BASE & PRE.	G010 ADMINISTRATIVE ASSISTANTS	K238S Radiation Protection	Linear	51.99	Hours
Factors 97 Hours	0.53595 --- FY00 Mav Earned Value Factor				
A5B CONSTRUCTION	0000 NONE	C100S Closure Site Services	Linear	6,821.54	Dollars
Factors 12728 Dollars	0.53595 --- FY00 Mav Earned Value Factor				
A5C SUPPLIES	0000 NONE	R100S RMRS Salaried	Linear	27,815.69	Dollars
Factors 50000 Dollars	1.038 sales tax	0.53595 --- FY00 Mav Earned Value Factor			
A5H SUBCONTRACTED SRVS	0000 NONE	K238S Radiation Protection	Linear	182,777.00	Dollars
Factors 182777 Dollars	EOY adjustment				
A5H SUBCONTRACTED SRVS	0000 NONE	K238S Radiation Protection	Linear	138,274.50	Dollars
Factors 258000 dollars	0.53595 --- FY00 Mav Earned Value Factor				
A5H SUBCONTRACTED SRVS	0000 NONE	K238S Radiation Protection	Linear	21,437.91	Dollars
Factors 40000 Dollars	0.53595 --- FY00 Mav Earned Value Factor				

Activity ID: 1HXXXJ3005 Description: Radiological Training FY06

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDD602	Radiological Records	0.96	each	HC	0	0	0	155,974	0	155,974	0	155,974
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	132,045	132,045	0	132,045
Total for Activity 1HXXXJ3005:						0	0	155,974	132,045	288,019	0	288,019

Line Item MTNHIDD602 - Radiological Records

BOE

Line Item: Manager duties and activities associated with final processing and/or archiving of radiological records.

Source of Data: FY99 data

Request for additional detail should be address to the Activity manager R. Weedon or S. Pike

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A55 SOURCE ONE	0000 NONE	K100S Kaiser-Hill	Linear	975.00	Dollars
Factors 15 boxes	65 dollars				

WBS No: 1HAJ30
Activity ID: 1HXXXJ3005

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A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	25.950.00	Dollars
Factors	25000	Dollars	1.038	sales tax				
A5H	SUBCONTRACTED SRVS	0000	NONE	K100S	Kaiser-Hill	Linear	134.720.90	Dollars
Factors	45	Dollars	3700	hours				

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	97.254.65	Dollars
	Factors 97254.7 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	34.790.04	Dollars
	Factors 34790.0 Dollars								

WBS No:	1HAJ40	Title:	Radiological Engineering	Cost Risk	2	Schedule Risk	1
Activity ID:	1HAJ400001	Description:	Radiological Engineering FY01				

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDN601-4	Radiological Engineering Supt to Site	1.00	each	HC	12.950	12.950	384.597	416.285	0	800.882	183.453	984.334
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	52.071	52.071	0	52.071
Total for Activity 1HAJ400001:						12.950	384.597	416.285	52.071	852.953	183.453	1.036.406

Line Item MTNHIDN601-4 - Radiological Engineering Supt to Site

BOE

Activity Scope:
Provides for radiological program resources necessary to perform and support activities that are tied to Site operations but are not specific to a building baseline. This WBS element provides for the direct-charged planning, administration, budget preparation, oversight, identification and corrective action of emerging Site radiological compliance requirements. Also includes Contract Technical Representative (CTR) responsibilities and support and funding for the Health Physics Instrumentation sub-contract.
Strategy:
Utilize appropriate skill mix to provide programmatic radiological support to Site Operations.
Regulatory Narrative:
Radiological Safety is driven by 10 CFR 835, Price Anderson Amendment Act (PAAA), DOE Radiological Control Standards (DOE-STD-1098-99) and several DOE orders.
Regulatory Drivers:
10 CFR 835, 10 CFR 830.120 and DOE Orders.
Hazard Narrative:
Radiological safety protection for public, workers and environment.
Cost/Risk Narrative:
N/A
Streamlining Text:
N/A
#***** Radiological Safety Management and Support
Line Item Scope:
Provide technical support services to Site Operations including review of radiological assessments, serve as Radiological Safety technical point of contact for PAAA and Lessons Learned program. Provide oversight and direction for RadCon Program. Serve as point of contact to provide interface/coordination for radiological issues. Identify emerging site operations radiological compliance issues; develop and/or coordinate corrective action of emerging issues requiring action. Ensure necessary documentation is provided for tracking into Site's Plant Action Tracking System (PATS). Ensure the site maintains

WBS No: 1HAJ40
Activity ID: 1HAJ400001

Rockv Flats Closure Project
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Project Baseline Devl
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Starts In FY *

compliance with the DOE's No Rad Added Program for property and waste releases. Maintain programmatic viability for Radiological Material Areas (RMA), contamination and radiation exposure control. Develop methodologies for determining radio-nuclide presence and associated health risks in conjunction with agreements with the DOE, EPA, Colorado Department of Public Health and Environment (CDPHE), coordinate and manage program compliance support budget, performance measures and reporting requirements. Prepare routine reporting of cost and schedule variance information. Provide administrative assistance and records management and control. Provide equipment accountability and control. Participate as technical authority in respiratory protection issues through the JCUSC and user worker groups. Support emergency protection readiness with Field Sampling Team resources. Act as liaison with visitor groups including the Arms Reduction Verification Project, RSDIC, and the media. Address DFNSB concerns relating to RE training and qualification.

BOE Assumptions: Quarterly activities for Operations radiological program compliance implementation. This BOE does not include the program management activities directly related to Site Operations programs and projects.

? Provide support for procedures development and maintenance required for regulatory compliance.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300B1-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 P080 Linear 1850 hours
RSPs, HSPs and technical basis documents (TBD) = 1900 hours/year
R631S A5C None Linear 4400 Dollars
Supplies including paper, binders, etc. = 4400 Dollars/year
Does not include costs for distribution of procedures.

? Provide programmatic compliance technical support.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 G010 Linear 1850 hours
Radiological Improvement Report (RIR) and Lessons Learned Program = 1350 hrs/year
10 CFR 835 compliance records and data base = 500 hrs/year
R631S 750 E050 Linear 2650 hours
Radioactive Source Control Program = 1850 hrs/year
Radiation Generating Device Program = 800 hrs/year

? Provide support for the Site Property and Waste Release Program

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources
k238 A5H RCT = \$20,000
R631S 750 P080 Linear 1850 hours
Property/Waste Unrestricted Release Program = 950 hrs/year
Develop and provide technical support to the SCO characterization program = 600 hrs/year
Provide annual review of P/WRE procedures = 100 hrs/year
Provide Onsite Transportation technical support = 80 hrs/year
Perform No Rad Added (NRA) program assessments = 80 hrs/year
Provide P/WRE implementation guidance = 40 hrs/year

? Provide support for the Site Respiratory Protection Program

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources
R660H A5H P080 Linear 60300 Dollars
Attend Respiratory Protection User Training classes = 80 hrs/year x \$50.25 = \$4020
Attend Respiratory Protection Advisory Committee meetings = 140 hrs/year x \$50.25 = \$7035
Investigate RP Safety Concerns/problems = 130 hrs/year x \$50.25 = \$6533
Support upgrades of RP Program equipment = 200 hrs/year x \$50.25 = \$10050
Provide vendor/procurement technical support = 100 hrs/year x \$50.25 = \$5025
Perform Bi-annual RP procedures update/review = 200 hrs/year x \$50.25 = \$10050

WBS No: 1HAJ40
Activity ID: 1HAJ400001

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Starts In FY *

Develop technical procedures/bases = 150 hrs/year x \$50.25 = \$7538
Perform STE duties = 200 hrs/year x \$50.25 = \$10050

? Provide technical radiological support to Emergency Preparedness.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300G1-4 for the staff currently holding the position described herein. A5C estimates derived from vendor cost for providing calibration services and the number of instruments in inventory and by "best guess" estimate of consumables to be used in drill and actual emergency responses.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 E050 Linear 850 hours

R631S A5C None Linear 25000 Dollars

Maintain the Field Sampling Team's response capability = 160 hrs/year

Provide training/qualification of OJT on FST = 240 hrs/year

Provide RE support of Site drills = 400 hrs/year

Perform FST/Rad EP procedure reviews = 50 hrs/year

Maintain supplies, equipment calibration = 25000 Dollars

? Provide technical oversight of the Site's Air Sampling/Monitoring Program

Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. This program ensures continued compliance to changing regulatory requirements and provides technical support in program application to changing Site mission and D&D of facilities.

Dept./Cost Center EOC Skill Curve Resources

R660H A5H P080 Linear 32663 Dollars

Provide tech. support to ensure regulatory compliance of the air sampling/monitoring program = 650 hrs/year x \$50.25 = \$32663

? Provide Radiological Engineering Technical and Administration support

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources

R660H A5H M020 Linear 102157 Dollars

Records Management support for Archiving = \$3,640

Technical Travel/Memberships = \$24,000

Provide management support to Radiological Engineering = 1850hrs/year x \$55.22 = \$102157

R631S 750 P080 Linear 1850 hours

Attend RSDIC chair/coordinate meetings = 400 hrs/year

Provide resolutions of safety concerns/RIR problems = 40 hrs/year

Investigate rad occurrences/support investigations = 150 hrs/year

Provide technical support to tours/VIPs = 400 hrs/year

Provide technical support to the Sites rad instrumentation program = 860 hrs/year

? Provide technical support to programs to control workers exposure pathways and to ensure Site regulatory compliance.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources

R631H A5H m020 Linear 102157 Dollars

Provide technical support to Site ORC = 2 hrs/mtg. x 26 mtg = 52 hrs x \$55.22 = \$2871

Perform Site Technical Expert duties for glovebag/soft-sided containment, radiation surveys, Radiological Material Area and work/contamination control programs = 1500 hrs x \$55.22 = \$82830

Perform as Program Administrator for 10CFR835/RPP/SRCM compliance status = 298 hrs x \$55.22 = \$16456

? Provide Program Administrator support to source disposal program, property release and technical support to the Level "B" garment.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 P080 Linear 1850 Hours

Maintain B126 Authorization Basis, source custodian/disposal requirements = 350 hours

Perform STE duties for Level "B" garment = 500 hours

Perform Program Administration duties for Radiological Records Retention Program (RRRP) and Unrestricted Release of administrative Property (URAP) program = 1000 hours

WBS No: 1HAJ40
Activity ID: 1HAJ400001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

*Being performed by SSOC employee

? Provide CTR and support for Health Physics Instrumentation.
Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. Level of effort required to support sub-contractors source inspections and oversee the contract.

Dept/Cost Center EOC Skill Curve Resources
R631S 750 T050 Linear 200 hours
Provide RCT support to Sub-contractor = 200 hrs/year
R631S 750 P080 Linear 200 hours
Provide management support and oversight = 200 hrs/year
R631S 750 P080 Linear 800 hours
Provide technical radiological and CTR support to sub-contractor = 800 hrs/year
R252H 750 (P080) Linear 600 hours
Calibrate sources and calibration equipment in support of site rad. detection instrumentation = 600 hours/year
R631S 750 (P080) Linear 250 hours
Provide miscellaneous Technician support of HP instrumentation = 250 hrs/year
R631S A5L None Linear 4800 Dollars
Obtain necessary equipment for facility maintenance = 4800 Dollars/year
R631S A5C None Linear 50,000 Dollars
Provide for equipment upgrades, supplies, purchase of new instruments for testing = 50000 Dollars/year
New and upgraded instruments and equipment is required to meet changing technologies (obsolescence of existing equipment), increased survey throughput needs and more stringent release requirements that require more sensitive equipment.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	3.700.00	Hours
Factors	1850 hours		2 employees					
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	1.850.00	Hours
Factors	1850 hours		1 employee					
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	7.400.00	Hours
Factors	1850 hours		4 employees					
A55	SOURCE ONE	0000	NONE	K238S	Radiation Protection	Linear	2.600.00	Dollars
Factors	40 boxes		65 box					
A55	SOURCE ONE	0000	NONE	K238S	Radiation Protection	Linear	1.040.00	Dollars
Factors	16 boxes		65 dollars					
A5C	SUPPLIES	0000	NONE	K238S	Radiation Protection	Linear	114.180.00	Dollars
Factors	110000 Dollars		1.038 sales tax					
A5H	SUBCONTRACTED SRVS	0000	NONE	K100S	Kaiser-Hill	Linear	8.900.48	Dollars
Factors	11000 dollars Bartlett?							
						0.80913 [SYS 061400] .80704 - System		
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	82.658.73	Dollars
Factors	1850 hours		55.22 dollars					
						0.80913 [SYS 061400] .80704 - System		
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	75.219.14	Dollars
Factors	1850 hours		50.25 dollars					
						0.80913 [SYS 061400] .80704 - System		
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	82.658.73	Dollars
Factors	1850 hours		55.22 dollars					
						0.80913 [SYS 061400] .80704 - System		
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	20.228.36	Dollars
Factors	25000 dollars for HPI							
						0.80913 [SYS 061400] .80704 - System		
A5L	RENTALS	0000	NONE	C242S	Transportation	Linear	4.800.00	Dollars
Factors	4800 Dollars							
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	24.000.00	Dollars
Factors	24000 dollars							

WBS No: 1HAJ40
Activity ID: 1HAJ400001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	31.373.12	Dollars
Factors 31373.1 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	20.698.35	Dollars
Factors 20698.4 Dollars								

Activity ID: 1HAJ400002 Description: Radiological Engineering FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDN601-4	Radiological Engineering Supt to Site	1.00	each	HC	12.950	12.950	384.597	394.269	0	778.865	135.763	914.628
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	136.351	136.351	0	136.351
Total for Activity 1HAJ400002:						12.950	384.597	394.269	136.351	915.217	135.763	1.050.979

Line Item MTNHIDN601-4 - Radiological Engineering Supt to Site

BOE

Activity Scope:
Provides for radiological program resources necessary to perform and support activities that are tied to Site operations but are not specific to a building baseline. This WBS element provides for the direct-charged planning, administration, budget preparation, oversight, identification and corrective action of emerging Site radiological compliance requirements. Also includes Contract Technical Representative (CTR) responsibilities and support and funding for the Health Physics Instrumentation sub-contract.
Strategy:
Utilize appropriate skill mix to provide programmatic radiological support to Site Operations.
Regulatory Narrative:
Radiological Safety is driven by 10 CFR 835, Price Anderson Amendment Act (PAAA), DOE Radiological Control Standards (DOE-STD-1098-99) and several DOE orders.
Regulatory Drivers:
10 CFR 835, 10 CFR 830.120 and DOE Orders.
Hazard Narrative:
Radiological safety protection for public, workers and environment.
Cost/Risk Narrative:
N/A
Streamlining Text:
N/A
***** Radiological Safety Management and Support
Line Item Scope:
Provide technical support services to Site Operations including review of radiological assessments, serve as Radiological Safety technical point of contact for PAAA and Lessons Learned program. Provide oversight and direction for RadCon Program. Serve as point of contact to provide interface/coordination for radiological issues. Identify emerging site operations radiological compliance issues; develop and/or coordinate corrective action of emerging issues requiring action. Ensure necessary documentation is provided for tracking into Site's Plant Action Tracking System (PATS). Ensure the site maintains compliance with the DOE's No Rad Added Program for property and waste releases. Maintain programmatic viability for Radiological Material Areas (RMA), contamination and radiation exposure control. Develop methodologies for determining radio-nuclide presence and associated health risks in conjunction with agreements with the DOE, EPA, Colorado Department of Public Health and Environment (CDPHE), coordinate and manage program compliance support budget, performance measures and reporting requirements. Prepare routine reporting of cost and schedule variance information. Provide administrative assistance and records management and control. Provide equipment accountability and control. Participate as technical authority in respiratory protection issues through the JCUSC and user worker groups. Support emergency protection readiness with Field Sampling Team resources. Act as liaison with visitor groups including the Arms Reduction Verification Project, RSDIC, and the media. Address DFNSB concerns relating to RE training and qualification.

WBS No: 1HAJ40
Activity ID: 1HAJ400002

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

BOE Assumptions: Quarterly activities for Operations radiological program compliance implementation. This BOE does not include the program management activities directly related to Site Operations programs and projects.

? Provide support for procedures development and maintenance required for regulatory compliance.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300B1-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 P080 Linear 1850 hours

RSPs, HSPs and technical basis documents (TBD) = 1900 hours/year

R631S A5C None Linear 4400 Dollars

Supplies including paper, binders, etc. = 4400 Dollars/year

Does not include costs for distribution of procedures.

? Provide programmatic compliance technical support.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 G010 Linear 1850 hours

Radiological Improvement Report (RIR) and Lessons Learned Program = 1350 hrs/year

10 CFR 835 compliance records and data base = 500 hrs/year

R631S 750 E050 Linear 2650 hours

Radioactive Source Control Program = 1850 hrs/year

Radiation Generating Device Program = 800 hrs/year

? Provide support for the Site Property and Waste Release Program

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 P080 Linear 1850 hours

Property/Waste Unrestricted Release Program = 950 hrs/year

Develop and provide technical support to the SCO characterization program = 600 hrs/year

Provide annual review of P/WRE procedures = 100 hrs/year

Provide Onsite Transportation technical support = 80 hrs/year

Perform No Rad Added (NRA) program assessments = 80 hrs/year

Provide P/WRE implementation guidance = 40 hrs/year

? Provide support for the Site Respiratory Protection Program

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R660H A5H P080 Linear 60300 Dollars

Attend Respiratory Protection User Training classes = 80 hrs/year x \$50.25 = \$4020

Attend Respiratory Protection Advisory Committee meetings = 140 hrs/year x \$50.25 = \$7035

Investigate RP Safety Concerns/problems = 130 hrs/year x \$50.25 = \$6533

Support upgrades of RP Program equipment = 200 hrs/year x \$50.25 = \$10050

Provide vendor/procurement technical support = 100 hrs/year x \$50.25 = \$5025

Perform Bi-annual RP procedures update/review = 200 hrs/year x \$50.25 = \$10050

Develop technical procedures/bases = 150 hrs/year x \$50.25 = \$7538

Perform STE duties = 200 hrs/year x \$50.25 = \$10050

? Provide technical radiological support to Emergency Preparedness.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300G1-4 for the staff currently holding the position described herein. A5C estimates derived from vendor cost for providing calibration services and the number of instruments in inventory and by "best guess" estimate of consumables to be used in drill and actual emergency responses.

WBS No: 1HAJ40
Activity ID: 1HAJ400002

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
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Activity Filter *

*Starts In FY **

Dept./Cost Center EOC Skill Curve Resources
R631S 750 E050 Linear 850 hours
R631S A5C None Linear 23000 Dollars
Maintain the Field Sampling Team's response capability = 160 hrs/year
Provide training/qualification of OJT on FST = 240 hrs/year
Provide RE support of Site drills = 400 hrs/year
Perform FST/Rad EP procedure reviews = 50 hrs/year
Maintain supplies, equipment calibration = 23000 Dollars

? Provide technical oversight of the Site's Air Sampling/Monitoring Program
Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. This program ensures continued compliance to changing regulatory requirements and provides technical support in program application to changing Site mission and D&D of facilities.

Dept./Cost Center EOC Skill Curve Resources
R660H A5H P080 Linear 32663 Dollars
Provide tech. support to ensure regulatory compliance of the air sampling/monitoring program = 650 hrs/year x \$50.25 = \$32663

? Provide Radiological Engineering Technical and Administration support
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631H A5H M020 Linear 102157 Dollars
Provide management support to Radiological Engineering = 1850hrs/year x \$55.22 = \$102157
Records Management support for Archiving = \$3,640
Technical Travel/Memberships = \$14,000
R631S 750 P080 Linear 1850 hours
Attend RSDIC chair/coordinate meetings = 400 hrs/year
Provide resolutions of safety concerns/RIR problems = 40 hrs/year
Investigate rad occurrences/support investigations = 150 hrs/year
Provide technical support to tours/VIPs = 400 hrs/year
Provide technical support to the Sites rad instrumentation program = 860 hrs/year

? Provide technical support to programs to control workers exposure pathways and to ensure Site regulatory compliance.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631H A5H m020 Linear 102157 Dollars
Provide technical support to Site ORC = 2 hrs/mtg. x 26 mtg = 52 hrs x \$55.22 = \$2871
Perform Site Technical Expert duties for glovebag/soft-sided containment, radiation surveys, Radiological Material Area and work/contamination control programs = 1500 hrs x \$55.22 = \$82830
Perform as Program Administrator for 10CFR835/RPP/SRCM compliance status = 298 hrs x \$55.22 = \$16456

? Provide Program Administrator support to source disposal program, property release and technical support to the Level "B" garment.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 P080 Linear 1850 Hours
Maintain B126 Authorization Basis, source custodian/disposal requirements = 350 hours
Perform STE duties for Level "B" garment = 500 hours
Perform Program Administration duties for Radiological Records Retention Program (RRRP) and Unrestricted Release of administrative Property (URAP) program = 1000 hours
*Being performed by SSOC employee

? Provide CTR and support for Health Physics Instrumentation.
Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. Level of effort required to support sub-contractors source inspections and oversee the contract.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 T050 Linear 200 hours

WBS No: 1HAJ40
Activity ID: 1HAJ400002

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Provide RCT support to Sub-contractor = 200 hrs/year
R631S 750 P080 Linear 200 hours
Provide management support and oversight = 200 hrs/year
R631S 750 P080 Linear 800 hours
Provide technical radiological and CTR support to sub-contractor = 800 hrs/year
R252H 750 (P080) Linear 600 hours
Calibrate sources and calibration equipment in support of site rad. detection instrumentation = 600 hours/year
R631S 750 (P080) Linear 250 hours
Provide miscellaneous Technician support of HP instrumentation = 250 hrs/year
R631S A5L None Linear 4800 Dollars
Obtain necessary equipment for facility maintenance = 4800 Dollars/year
R631S A5C None Linear 50,000 Dollars
Provide for equipment upgrades, supplies, purchase of new instruments for testing = 50000 Dollars/year
New and upgraded instruments and equipment is required to meet changing technologies (obsolescence of existing equipment), increased survey throughput needs and more stringent release requirements that require more sensitive equipment.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	3,700.00	Hours
Factors	1850 hours	2	employees					
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	1,850.00	Hours
Factors	1850 hours	1	employee					
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	7,400.00	Hours
Factors	1850 hours	4	employees					
A55	SOURCE ONE	0000	NONE	K238S	Radiation Protection	Linear	2,600.00	Dollars
Factors	40 boxes	65	dollars					
A5C	SUPPLIES	0000	NONE	K238S	Radiation Protection	Linear	112,104.00	Dollars
Factors	108000 Dollars	1.038	sales tax					
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	82,658.73	Dollars
Factors	1850 hours	55.22	dollars					
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	82,658.73	Dollars
Factors	1850 hours	55.22	dollars					
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	75,219.14	Dollars
Factors	1850 hours	50.25	dollars					
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	20,228.36	Dollars
Factors	25000 dollars							
A5L	RENTALS	0000	NONE	C242S	Transportation	Linear	4,800.00	Dollars
Factors	4800 Dollars							
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	14,000.00	Dollars
Factors	14000 dollars							

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	93,609.32	Dollars
Factors	93609.3 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	42,741.89	Dollars
Factors	42741.9 Dollars							

Activity ID: 1HAJ400003 Description: Radiological Engineering FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDN601-4	Radiological Engineering Supt to Site	1.00	each	HC	8.715	8.715	258,833	114,603	0	373,437	89,556	462,993

WBS No: 1HAJ40
Activity ID: 1HAJ400003

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	128.042	128.042	0	128.042
Total for Activity 1HAJ400003:						8.715	258.833	114.603	128.042	501.479	89.556	591.035

Line Item MTNHIDN601-4 - Radiological Engineering Supt to Site

BOE

Activity Scope:

Provides for radiological program resources necessary to perform and support activities that are tied to Site operations but are not specific to a building baseline. This WBS element provides for the direct-charged planning, administration, budget preparation, oversight, identification and corrective action of emerging Site radiological compliance requirements. Also includes Contract Technical Representative (CTR) responsibilities and support and funding for the Health Physics Instrumentation sub-contract.

Strategy:

Utilize appropriate skill mix to provide programmatic radiological support to Site Operations.

Regulatory Narrative:

Radiological Safety is driven by 10 CFR 835, Price Anderson Amendment Act (PAAA), DOE Radiological Control Standards (DOE-STD-1098-99) and several DOE orders.

Regulatory Drivers:

10 CFR 835, 10 CFR 830.120 and DOE Orders.

Hazard Narrative:

Radiological safety protection for public, workers and environment.

Cost/Risk Narrative:

N/A

Streamlining Text:

N/A

#***** Radiological Safety Management and Support

Line Item Scope:

Provide technical support services to Site Operations including review of radiological assessments, serve as Radiological Safety technical point of contact for PAAA and Lessons Learned program. Provide oversight and direction for RadCon Program. Serve as point of contact to provide interface/coordination for radiological issues. Identify emerging site operations radiological compliance issues; develop and/or coordinate corrective action of emerging issues requiring action. Ensure necessary documentation is provided for tracking into Site's Plant Action Tracking System (PATs). Ensure the site maintains compliance with the DOE's No Rad Added Program for property and waste releases. Maintain programmatic viability for Radiological Material Areas (RMA), contamination and radiation exposure control. Develop methodologies for determining radio-nuclide presence and associated health risks in conjunction with agreements with the DOE, EPA, Colorado Department of Public Health and Environment (CDPHE), coordinate and manage program compliance support budget, performance measures and reporting requirements. Prepare routine reporting of cost and schedule variance information. Provide administrative assistance and records management and control. Provide equipment accountability and control. Participate as technical authority in respiratory protection issues through the JCUSC and user worker groups. Support emergency protection readiness with Field Sampling Team resources. Act as liaison with visitor groups including the Arms Reduction Verification Project, RSDIC, and the media. Address DFNSB concerns relating to RE training and qualification.

BOE Assumptions: Quarterly activities for Operations radiological program compliance implementation. This BOE does not include the program management activities directly related to Site Operations programs and projects.

? Provide support for procedures development and maintenance required for regulatory compliance.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300B1-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 P080 Linear 1850 hours

RSPs, HSPs and technical basis documents (TBD) = 1900 hours/year

R631S A5C None Linear 4400 Dollars

WBS No: 1HAJ40
Activity ID: 1HAJ400003

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Supplies including paper, binders, etc. = 4400 Dollars/year
Does not include costs for distribution of procedures.

? Provide programmatic compliance technical support.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 G010 Linear 1850 hours
Radiological Improvement Report (RIR) and Lessons Learned Program = 1350 hrs/year
10 CFR 835 compliance records and data base = 500 hrs/year
R631S 750 E050 Linear 2650 hours
Radioactive Source Control Program = 1850 hrs/year
Radiation Generating Device Program = 800 hrs/year

? Provide support for the Site Property and Waste Release Program
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 P080 Linear 1850 hours
Property/Waste Unrestricted Release Program = 950 hrs/year
Develop and provide technical support to the SCO characterization program = 600 hrs/year
Provide annual review of P/WRE procedures = 100 hrs/year
Provide Onsite Transportation technical support = 80 hrs/year
Perform No Rad Added (NRA) program assessments = 80 hrs/year
Provide P/WRE implementation guidance = 40 hrs/year

? Provide support for the Site Respiratory Protection Program
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources
R660H A5H P080 Linear 60300 Dollars
Attend Respiratory Protection User Training classes = 80 hrs/year x \$50.25 = \$4020
Attend Respiratory Protection Advisory Committee meetings = 140 hrs/year x \$50.25 = \$7035
Investigate RP Safety Concerns/problems = 130 hrs/year x \$50.25 = \$6533
Support upgrades of RP Program equipment = 200 hrs/year x \$50.25 = \$10050
Provide vendor/procurement technical support = 100 hrs/year x \$50.25 = \$5025
Perform Bi-annual RP procedures update/review = 200 hrs/year x \$50.25 = \$10050
Develop technical procedures/bases = 150 hrs/year x \$50.25 = \$7538
Perform STE duties = 200 hrs/year x \$50.25 = \$10050

? Provide technical radiological support to Emergency Preparedness.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300G1-4 for the staff currently holding the position described herein. A5C estimates derived from vendor cost for providing calibration services and the number of instruments in inventory and by "best guess" estimate of consumables to be used in drill and actual emergency responses.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 E050 Linear 850 hours
R631S A5C None Linear 23000 Dollars
Maintain the Field Sampling Team's response capability = 160 hrs/year
Provide training/qualification of OJT on FST = 240 hrs/year
Provide RE support of Site drills = 400 hrs/year
Perform FST/Rad EP procedure reviews = 50 hrs/year
Maintain supplies, equipment calibration = 23000 Dollars

? Provide technical oversight of the Site's Air Sampling/Monitoring Program
Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. This program ensures continued compliance to changing regulatory requirements and provides technical support in program application to changing Site mission and D&D of facilities.

Dept./Cost Center EOC Skill Curve Resources

WBS No: 1HAJ40
Activity ID: 1HAJ400003

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

R660H A5H P080 Linear 32663 Dollars
Provide tech. support to ensure regulatory compliance of the air sampling/monitoring program = 650 hrs/year x \$50.25 = \$32663

? Provide Radiological Engineering Technical and Administration support
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631H A5H M020 Linear 102157 Dollars
Provide management support to Radiological Engineering = 1850hrs/year x \$55.22 = \$102157
Records Management support for Archiving = \$3,640
Technical Travel/Memberships = \$14,000
R631S 750 P080 Linear 1850 hours
Attend RSDIC chair/coordinate meetings = 400 hrs/year
Provide resolutions of safety concerns/RIR problems = 40 hrs/year
Investigate rad occurrences/support investigations = 150 hrs/year
Provide technical support to tours/VIPs = 400 hrs/year
Provide technical support to the Sites rad instrumentation program = 860 hrs/year

? Provide technical support to programs to control workers exposure pathways and to ensure Site regulatory compliance.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631H A5H M020 Linear 102157 Dollars
Provide technical support to Site ORC = 2 hrs/mtg. x 26 mtg = 52 hrs x \$55.22 = \$2871
Perform Site Technical Expert duties for glovebag/soft-sided containment, radiation surveys, Radiological Material Area and work/contamination control programs = 1500 hrs x \$55.22 = \$82830
Perform as Program Administrator for 10CFR835/RPP/SRCM compliance status = 298 hrs x \$55.22 = \$16456

? Provide Program Administrator support to source disposal program, property release and technical support to the Level "B" garment.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 P080 Linear 1850 Hours
Maintain B126 Authorization Basis, source custodian/disposal requirements = 350 hours
Perform STE duties for Level "B" garment = 500 hours
Perform Program Administration duties for Radiological Records Retention Program (RRRP) and Unrestricted Release of administrative Property (URAP) program = 1000 hours
*Being performed by SSOC employee

? Provide CTR and support for Health Physics Instrumentation.
Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. Level of effort required to support sub-contractors source inspections and oversee the contract.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 T050 Linear 200 hours
Provide RCT support to Sub-contractor = 200 hrs/year
R631S 750 P080 Linear 200 hours
Provide management support and oversight = 200 hrs/year
R631S 750 P080 Linear 800 hours
Provide technical radiological and CTR support to sub-contractor = 800 hrs/year
R252H 750 (P080) Linear 600 hours
Calibrate sources and calibration equipment in support of site rad. detection instrumentation = 600 hours/year
R631S 750 (P080) Linear 250 hours
Provide miscellaneous Technician support of HP instrumentation = 250 hrs/year
R631S A5L None Linear 4800 Dollars
Obtain necessary equipment for facility maintenance = 4800 Dollars/year
R631S A5C None Linear 50,000 Dollars
Provide for equipment upgrades, supplies, purchase of new instruments for testing = 50000 Dollars/year
New and upgraded instruments and equipment is required to meet changing technologies (obsolescence of existing equipment), increased survey throughput needs

WBS No: 1HAJ40
Activity ID: 1HAJ400003

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

and more stringent release requirements that require more sensitive equipment.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	2.490.10	Hours
Factors	1850	hours	2	employees	0.673	unilateral reduct			
	750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	1.245.05	Hours
Factors	1850	hours	1	employee	0.673	unilateral reduct			
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	4.980.20	Hours
Factors	1850	hours	4	employees	0.673	unilateral reduct			
	A55	SOURCE ONE	0000	NONE	K238S	Radiation Protection	Linear	2.449.72	Dollars
Factors	56	boxes	65	dollar	0.673	unilateral reduct			
	A5C	SUPPLIES	0000	NONE	K238S	Radiation Protection	Linear	75.445.99	Dollars
Factors	108000	Dollars	1.038	sales tax	0.673	unilateral reduct			
	A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	9.768.51	Dollars
Factors	1850	hours	55.22	dollars	0.673	unilateral reduct	0.1756 FY00 adi up recon		
	A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	13.613.68	Dollars
Factors	25000	dollars			0.673	unilateral reduct	0.80913 - [SYS 061400] .80704 - Svstem		
	A5L	RENTALS	0000	NONE	C242S	Transportation	Linear	3.230.40	Dollars
Factors	4800	Dollars			0.673	unilateral reduct			
	A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	10.095.00	Dollars
Factors	15000	dollars			0.673	unilateral reduct			

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	92.537.38	Dollars
Factors	92537.4	Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	35.504.75	Dollars
Factors	35504.8	Dollars							

Activity ID: 1HAJ400004 Description: Radiological Engineering FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDN601-4	Radiological Engineering Supt to Site	1.00	each	HC	5.985	5.985	189.405	130.343	0	319.748	53.412	373.161
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	53.181	53.181	0	53.181
Total for Activity 1HAJ400004:						5.985	189.405	130.343	53.181	372.929	53.412	426.341

Line Item MTNHIDN601-4 - Radiological Engineering Supt to Site

BOE

Activity Scope:

Provides for radiological program resources necessary to perform and support activities that are tied to Site operations but are not specific to a building baseline. This WBS element provides for the direct-charged planning, administration, budget preparation, oversight, identification and corrective action of emerging Site radiological compliance requirements. Also includes Contract Technical Representative (CTR) responsibilities and support and funding for the Health Physics Instrumentation sub-contract.

Strategy:

Utilize appropriate skill mix to provide programmatic radiological support to Site Operations.

Regulatory Narrative:

Radiological Safety is driven by 10 CFR 835, Price Anderson Amendment Act (PAAA), DOE Radiological Control Standards (DOE-STD-1098-99) and several DOE orders.

Regulatory Drivers:

WBS No: 1HAJ40
Activity ID: 1HAJ400004

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

10 CFR 835, 10 CFR 830.120 and DOE Orders.

Hazard Narrative:

Radiological safety protection for public, workers and environment.

Cost/Risk Narrative:

N/A

Streamlining Text:

N/A

#***** Radiological Safety Management and Support
Line Item Scope:

Provide technical support services to Site Operations including review of radiological assessments, serve as Radiological Safety technical point of contact for PAAA and Lessons Learned program. Provide oversight and direction for RadCon Program. Serve as point of contact to provide interface/coordination for radiological issues. Identify emerging site operations radiological compliance issues; develop and/or coordinate corrective action of emerging issues requiring action. Ensure necessary documentation is provided for tracking into Site's Plant Action Tracking System (PATS). Ensure the site maintains compliance with the DOE's No Rad Added Program for property and waste releases. Maintain programmatic viability for Radiological Material Areas (RMA), contamination and radiation exposure control. Develop methodologies for determining radio-nuclide presence and associated health risks in conjunction with agreements with the DOE, EPA, Colorado Department of Public Health and Environment (CDPHE), coordinate and manage program compliance support budget, performance measures and reporting requirements. Prepare routine reporting of cost and schedule variance information. Provide administrative assistance and records management and control. Provide equipment accountability and control. Participate as technical authority in respiratory protection issues through the JCUSC and user worker groups. Support emergency protection readiness with Field Sampling Team resources. Act as liaison with visitor groups including the Arms Reduction Verification Project, RSDIC, and the media. Address DFNSB concerns relating to RE training and qualification.

BOE Assumptions: Quarterly activities for Operations radiological program compliance implementation. This BOE does not include the program management activities directly related to Site Operations programs and projects.

? Provide support for procedures development and maintenance required for regulatory compliance.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300B1-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 P080 Linear 1850 hours

RSPs, HSPs and technical basis documents (TBD) = 1900 hours/year

R631S A5C None Linear 4400 Dollars

Supplies including paper, binders, etc. = 4400 Dollars/year

Does not include costs for distribution of procedures.

? Provide programmatic compliance technical support.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 G010 Linear 0 hours

Radiological Improvement Report (RIR) and Lessons Learned Program = 1350 hrs/year

10 CFR 835 compliance records and data base = 500 hrs/year

R631S 750 E050 Linear 2650 hours

Radioactive Source Control Program = 1850 hrs/year

Radiation Generating Device Program = 800 hrs/year

? Provide support for the Site Property and Waste Release Program

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 P080 Linear 1850 hours

WBS No: 1HAJ40
Activity ID: 1HAJ400004

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Property/Waste Unrestricted Release Program = 950 hrs/year
Develop and provide technical support to the SCO characterization program = 600 hrs/year
Provide annual review of P/WRE procedures = 100 hrs/year
Provide Onsite Transportation technical support = 80 hrs/year
Perform No Rad Added (NRA) program assessments = 80 hrs/year
Provide P/WRE implementation guidance = 40 hrs/year

? Provide support for the Site Respiratory Protection Program
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources
R660H A5H P080 Linear 60300 Dollars
Attend Respiratory Protection User Training classes = 80 hrs/year x \$50.25 = \$4020
Attend Respiratory Protection Advisory Committee meetings = 140 hrs/year x \$50.25 = \$7035
Investigate RP Safety Concerns/problems = 130 hrs/year x \$50.25 = \$6533
Support upgrades of RP Program equipment = 200 hrs/year x \$50.25 = \$10050
Provide vendor/procurement technical support = 100 hrs/year x \$50.25 = \$5025
Perform Bi-annual RP procedures update/review = 200 hrs/year x \$50.25 = \$10050
Develop technical procedures/bases = 150 hrs/year x \$50.25 = \$7538
Perform STE duties = 200 hrs/year x \$50.25 = \$10050

? Provide technical radiological support to Emergency Preparedness.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300G1-4 for the staff currently holding the position described herein. A5C estimates derived from vendor cost for providing calibration services and the number of instruments in inventory and by "best guess" estimate of consumables to be used in drill and actual emergency responses.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 E050 Linear 850 hours
R631S A5C None Linear 23000 Dollars
Maintain the Field Sampling Team's response capability = 160 hrs/year
Provide training/qualification of OJT on FST = 240 hrs/year
Provide RE support of Site drills = 400 hrs/year
Perform FST/Rad EP procedure reviews = 50 hrs/year
Maintain supplies, equipment calibration = 23000 Dollars

? Provide technical oversight of the Site's Air Sampling/Monitoring Program
Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. This program ensures continued compliance to changing regulatory requirements and provides technical support in program application to changing Site mission and D&D of facilities.

Dept./Cost Center EOC Skill Curve Resources
R660H A5H P080 Linear 32663 Dollars
Provide tech. support to ensure regulatory compliance of the air sampling/monitoring program = 650 hrs/year x \$50.25 = \$32663

? Provide Radiological Engineering Technical and Administration support
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631H A5H M020 Linear 102157 Dollars
Provide management support to Radiological Engineering = 1850hrs/year x \$55.22 = \$102157
Records Management support for Archiving = \$3,640
Technical Travel/Memberships = \$14,000
R631S 750 P080 Linear 1850 hours
Attend RSDIC chair/coordinate meetings = 400 hrs/year
Provide resolutions of safety concerns/RIR problems = 40 hrs/year
Investigate rad occurrences/support investigations = 150 hrs/year
Provide technical support to tours/VIPs = 400 hrs/year
Provide technical support to the Sites rad instrumentation program = 860 hrs/year

WBS No: 1HAJ40
Activity ID: 1HAJ400004

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

? Provide technical support to programs to control workers exposure pathways and to ensure Site regulatory compliance.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631H A5H m020 Linear 102157 Dollars
Provide technical support to Site ORC = 2 hrs/mtg. x 26 mtg = 52 hrs x \$55.22 = \$2871
Perform Site Technical Expert duties for glovebag/soft-sided containment, radiation surveys, Radiological Material Area and work/contamination control programs = 1500 hrs x \$55.22 = \$82830
Perform as Program Administrator for 10CFR835/RPP/SRCM compliance status = 298 hrs x \$55.22 = \$16456

? Provide Program Administrator support to source disposal program, property release and technical support to the Level "B" garment.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 P080 Linear 1850 Hours
Maintain B126 Authorization Basis, source custodian/disposal requirements = 350 hours
Perform STE duties for Level "B" garment = 500 hours
Perform Program Administration duties for Radiological Records Retention Program (RRRP) and Unrestricted Release of administrative Property (URAP) program = 1000 hours
*Being performed by SSOC employee

? Provide CTR and support for Health Physics Instrumentation.
Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. Level of effort required to support sub-contractors source inspections and oversee the contract.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 T050 Linear 200 hours
Provide RCT support to Sub-contractor = 200 hrs/year
R631S 750 P080 Linear 200 hours
Provide management support and oversight = 200 hrs/year
R631S 750 P080 Linear 800 hours
Provide technical radiological and CTR support to sub-contractor = 800 hrs/year
R252H 750 (P080) Linear 600 hours
Calibrate sources and calibration equipment in support of site rad. detection instrumentation = 600 hours/year
R631S 750 (P080) Linear 250 hours
Provide miscellaneous Technician support of HP instrumentation = 250 hrs/year
R631S A5L None Linear 4800 Dollars
Obtain necessary equipment for facility maintenance = 4800 Dollars/year
R631S A5C None Linear 50,000 Dollars
Provide for equipment upgrades, supplies, purchase of new instruments for testing = 50000 Dollars/year
New and upgraded instruments and equipment is required to meet changing technologies (obsolescence of existing equipment), increased survey throughput needs and more stringent release requirements that require more sensitive equipment.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	2,393.90	Hours
Factors	1850 hours	2	employees	0.647	unilateral reduct			
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	3,590.85	Hours
Factors	1850 hours	3	employees	0.647	unilateral reduct			
A55	SOURCE ONE	0000	NONE	K238S	Radiation Protection	Linear	2,355.08	Dollars
Factors	56 boxes	65	dollars	0.647	unilateral reduct			
A5C	SUPPLIES	0000	NONE	K238S	Radiation Protection	Linear	72,531.29	Dollars
Factors	108000 Dollars	1.038	sales tax	0.647	unilateral reduct			
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	52,350.99	Dollars
Factors	100000 dollars			0.647	unilateral reduct			
0.80913 [SYS 061400] .80704 - System								
A5L	RENTALS	0000	NONE	C242S	Transportation	Linear	3,105.60	Dollars
Factors	4800 Dollars			0.647	unilateral reduct			

WBS No: 1HAJ40
Activity ID: 1HAJ400004

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	17.351.29	Dollars
Factors 17351.3 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	35.829.50	Dollars
Factors 35829.5 Dollars								

Activity ID: 1HAJ400005 Description: Radiological Engineering FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDN601-4	Radiological Engineering Supt to Site	1.00	each	HC	3.700	3.700	115.810	16.100	0	131.910	40.302	172.212
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	91.890	91.890	0	91.890
Total for Activity 1HAJ400005:						3.700	115.810	16.100	91.890	223.800	40.302	264.102

Line Item MTNHIDN601-4 - Radiological Engineering Supt to Site

BOE

Activity Scope:
Provides for radiological program resources necessary to perform and support activities that are tied to Site operations but are not specific to a building baseline. This WBS element provides for the direct-charged planning, administration, budget preparation, oversight, identification and corrective action of emerging Site radiological compliance requirements. Also includes Contract Technical Representative (CTR) responsibilities and support and funding for the Health Physics Instrumentation sub-contract.
Strategy:
Utilize appropriate skill mix to provide programmatic radiological support to Site Operations.
Regulatory Narrative:
Radiological Safety is driven by 10 CFR 835, Price Anderson Amendment Act (PAAA), DOE Radiological Control Standards (DOE-STD-1098-99) and several DOE orders.
Regulatory Drivers:
10 CFR 835, 10 CFR 830.120 and DOE Orders.
Hazard Narrative:
Radiological safety protection for public, workers and environment.
Cost/Risk Narrative:
N/A
Streamlining Text:
N/A
#***** Radiological Safety Management and Support
Line Item Scope:
Provide technical support services to Site Operations including review of radiological assessments, serve as Radiological Safety technical point of contact for PAAA and Lessons Learned program. Provide oversight and direction for RadCon Program. Serve as point of contact to provide interface/coordination for radiological issues. Identify emerging site operations radiological compliance issues; develop and/or coordinate corrective action of emerging issues requiring action. Ensure necessary documentation is provided for tracking into Site's Plant Action Tracking System (PATS). Ensure the site maintains compliance with the DOE's No Rad Added Program for property and waste releases. Maintain programmatic viability for Radiological Material Areas (RMA), contamination and radiation exposure control. Develop methodologies for determining radio-nuclide presence and associated health risks in conjunction with agreements with the DOE, EPA, Colorado Department of Public Health and Environment (CDPHE), coordinate and manage program compliance support budget, performance measures and reporting requirements. Prepare routine reporting of cost and schedule variance information. Provide administrative assistance and records management and control. Provide equipment accountability and control. Participate as technical authority in respiratory protection issues through the JCUSC and user worker groups. Support emergency protection readiness with Field Sampling Team resources. Act as liaison with visitor groups including the Arms Reduction Verification Project, RSDIC, and the media. Address DFNSB concerns relating to RE training and qualification.

WBS No: 1HAJ40
Activity ID: 1HAJ400005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

BOE Assumptions: Quarterly activities for Operations radiological program compliance implementation. This BOE does not include the program management activities directly related to Site Operations programs and projects.

? Provide support for procedures development and maintenance required for regulatory compliance.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300B1-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 P080 Linear 1850 hours

RSPs, HSPs and technical basis documents (TBD) = 1900 hours/year

R631S A5C None Linear 4400 Dollars

Supplies including paper, binders, etc. = 4400 Dollars/year

Does not include costs for distribution of procedures.

? Provide programmatic compliance technical support.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 G010 Linear 0 hours

Radiological Improvement Report (RIR) and Lessons Learned Program = 1350 hrs/year

10 CFR 835 compliance records and data base = 500 hrs/year

R631S 750 E050 Linear 2650 hours

Radioactive Source Control Program = 1850 hrs/year

Radiation Generating Device Program = 800 hrs/year

? Provide support for the Site Property and Waste Release Program

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 P080 Linear 1850 hours

Property/Waste Unrestricted Release Program = 950 hrs/year

Develop and provide technical support to the SCO characterization program = 600 hrs/year

Provide annual review of P/WRE procedures = 100 hrs/year

Provide Onsite Transportation technical support = 80 hrs/year

Perform No Rad Added (NRA) program assessments = 80 hrs/year

Provide P/WRE implementation guidance = 40 hrs/year

? Provide support for the Site Respiratory Protection Program

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R660H A5H P080 Linear 60300 Dollars

Attend Respiratory Protection User Training classes = 80 hrs/year x \$50.25 = \$4020

Attend Respiratory Protection Advisory Committee meetings = 140 hrs/year x \$50.25 = \$7035

Investigate RP Safety Concerns/problems = 130 hrs/year x \$50.25 = \$6533

Support upgrades of RP Program equipment = 200 hrs/year x \$50.25 = \$10050

Provide vendor/procurement technical support = 100 hrs/year x \$50.25 = \$5025

Perform Bi-annual RP procedures update/review = 200 hrs/year x \$50.25 = \$10050

Develop technical procedures/bases = 150 hrs/year x \$50.25 = \$7538

Perform STE duties = 200 hrs/year x \$50.25 = \$10050

? Provide technical radiological support to Emergency Preparedness.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300G1-4 for the staff currently holding the position described herein. A5C estimates derived from vendor cost for providing calibration services and the number of instruments in inventory and by "best guess" estimate of consumables to be used in drill and actual emergency responses.

WBS No: 1HAJ40
Activity ID: 1HAJ400005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

*Starts In FY **

Dept./Cost Center EOC Skill Curve Resources
R631S 750 E050 Linear 850 hours
R631S A5C None Linear 23000 Dollars
Maintain the Field Sampling Team's response capability = 160 hrs/year
Provide training/qualification of OJT on FST = 240 hrs/year
Provide RE support of Site drills = 400 hrs/year
Perform FST/Rad EP procedure reviews = 50 hrs/year
Maintain supplies, equipment calibration = 23000 Dollars

? Provide technical oversight of the Site's Air Sampling/Monitoring Program
Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. This program ensures continued compliance to changing regulatory requirements and provides technical support in program application to changing Site mission and D&D of facilities.

Dept./Cost Center EOC Skill Curve Resources
R660H A5H P080 Linear 32663 Dollars
Provide tech. support to ensure regulatory compliance of the air sampling/monitoring program = 650 hrs/year x \$50.25 = \$32663

? Provide Radiological Engineering Technical and Administration support
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631H A5H M020 Linear 102157 Dollars
Provide management support to Radiological Engineering = 1850hrs/year x \$55.22 = \$102157
Records Management support for Archiving = \$3,640
Technical Travel/Memberships = \$14,000
R631S 750 P080 Linear 1850 hours
Attend RSDIC chair/coordinate meetings = 400 hrs/year
Provide resolutions of safety concerns/RIR problems = 40 hrs/year
Investigate rad occurrences/support investigations = 150 hrs/year
Provide technical support to tours/VIPs = 400 hrs/year
Provide technical support to the Sites rad instrumentation program = 860 hrs/year

? Provide technical support to programs to control workers exposure pathways and to ensure Site regulatory compliance.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631H A5H m020 Linear 102157 Dollars
Provide technical support to Site ORC = 2 hrs/mtg. x 26 mtg = 52 hrs x \$55.22 = \$2871
Perform Site Technical Expert duties for glovebag/soft-sided containment, radiation surveys, Radiological Material Area and work/contamination control programs = 1500 hrs x \$55.22 = \$82830
Perform as Program Administrator for 10CFR835/RPP/SRCM compliance status = 298 hrs x \$55.22 = \$16456

? Provide Program Administrator support to source disposal program, property release and technical support to the Level "B" garment.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 P080 Linear 1850 Hours
Maintain B126 Authorization Basis, source custodian/disposal requirements = 350 hours
Perform STE duties for Level "B" garment = 500 hours
Perform Program Administration duties for Radiological Records Retention Program (RRRP) and Unrestricted Release of administrative Property (URAP) program = 1000 hours
*Being performed by SSOC employee

? Provide CTR and support for Health Physics Instrumentation.
Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. Level of effort required to support sub-contractors source inspections and oversee the contract.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 T050 Linear 200 hours

WBS No: 1HAJ40
Activity ID: 1HAJ40005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Provide RCT support to Sub-contractor = 200 hrs/year
R631S 750 P080 Linear 200 hours
Provide management support and oversight = 200 hrs/year
R631S 750 P080 Linear 800 hours
Provide technical radiological and CTR support to sub-contractor = 800 hrs/year
R252H 750 (P080) Linear 600 hours
Calibrate sources and calibration equipment in support of site rad. detection instrumentation = 600 hours/year
R631S 750 (P080) Linear 250 hours
Provide miscellaneous Technician support of HP instrumentation = 250 hrs/year
R631S A5L None Linear 4800 Dollars
Obtain necessary equipment for facility maintenance = 4800 Dollars/year
R631S A5C None Linear 50,000 Dollars
Provide for equipment upgrades, supplies, purchase of new instruments for testing = 50000 Dollars/year
New and upgraded instruments and equipment is required to meet changing technologies (obsolescence of existing equipment), increased survey throughput needs and more stringent release requirements that require more sensitive equipment.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	1.850.00	Hours
Factors	1850	hours	1	employees			
	750	STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	R100S RMRS Salaried	Linear	1.850.00	Hours
Factors	1850	hours	1	employees			
	A55	SOURCE ONE	0000 NONE	K238S Radiation Protection	Linear	5.720.00	Dollars
Factors	88	boxes	65	dollars			
	A5C	SUPPLIES	0000 NONE	K238S Radiation Protection	Linear	10.380.00	Dollars
Factors	10000	Dollars	1.038	sales tax			

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	65.212.06	Dollars
Factors	65212.1	Dollars					
	ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	26.678.29	Dollars
Factors	26678.3	Dollars					

Activity ID: 1HAJ4000P2 Description: Radiological Engineering

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDT601	Radiological Engineering Supt to Site	1.00	each	HC	4.689	4.689	136.869	400.168	0	537.037	66.792	603.829
Total for Activity 1HAJ4000P2:						4.689	136.869	400.168	0	537.037	66.792	603.829

Line Item MTNHIDT601 - Radiological Engineering Supt to Site

BOE

Source of Data - FY98 Actuals, Labor & ODC, downloaded to EXCEL and verified against Project F98SEP, 002 Detailed Wadlet/Chrg Spending Variance Report, 002a Wadlet/Charge No. Lvl Spending Variance Report and the 002a Wadlet Spending Variance Report. These historical documents are in the budget analyst's office. (NH7300G1-4)

Item Desc: Provide Technical Radiological Support to Emergency Preparedness
Item: Technical Support
Units: 1 lot
Unit Cost: 314 hours, \$13,784 other direct costs
Unit Cost Adjustment Factor: 886 hours/+282%, \$11,642/+84.5% other direct costs
Revised Unit Cost: 1,200 hours, \$25,426 other direct costs

Basis for Adjustment: Incorporated Field Sampling Team (FST) costs into this WADlet. Added second team to adequately support the Emergency Management Organization (EMO). Subcontracted support to calibrate/repair emergency response equipment.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	R100S RMRS Salaried	Linear	2.004.82	Hours
Factors	1850	hours	3	employees	0.674		
	750	STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	R100S RMRS Salaried	Linear	668.27	Hours
Factors	1850	hours	1	employee	0.674		

WBS No: 1HAJ40
Activity ID: 1HAJ4000P2

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	2,004.82	Hours
Factors	1850 hours		3 employees		0.674	0.53595 --- FY00 May Earned Value Factor		
751	OVERTIME BASE & PRE.	G010	ADMINISTRATIVE ASSISTANTS	R100S	RMRS Salaried	Linear	10.72	Hours
Factors	20 Hours				0.53595 --- FY00 May Earned Value Factor			
A52	TENERA	0000	NONE	K100S	Kaiser-Hill	Linear	12,326.80	Dollars
Factors	23000 Dollars				0.53595 --- FY00 May Earned Value Factor			
A57	LATA	0000	NONE	K100S	Kaiser-Hill	Linear	2,679.74	Dollars
Factors	5000 Dollars				0.53595 --- FY00 May Earned Value Factor			
A5C	SUPPLIES	0000	NONE	K238S	Radiation Protection	Linear	45,339.57	Dollars
Factors	81500 Dollars		1.038 sales tax		0.53595 --- FY00 May Earned Value Factor			
A5H	SUBCONTRACTED SRVS	0000	NONE	K100S	Kaiser-Hill	Linear	56,274.51	Dollars
Factors	105000 dollars Barton				0.53595 --- FY00 May Earned Value Factor			
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	56,673.00	Dollars
Factors	56673 dollars		EOY adjustment					
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	36,902.05	Dollars
Factors	1850 hours		55.22 dollars		0.674	0.53595 --- FY00 May Earned Value Factor		
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	36,902.05	Dollars
Factors	1850 hours		55.22 dollars		0.674	0.53595 --- FY00 May Earned Value Factor		
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	33,580.73	Dollars
Factors	1850 hours		50.25 dollars		0.674	0.53595 --- FY00 May Earned Value Factor		
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	32,156.87	Dollars
Factors	60000 dollars				0.53595 --- FY00 May Earned Value Factor			
A5H	SUBCONTRACTED SRVS	0000	NONE	R100S	RMRS Salaried	Linear	69,646.41	Dollars
Factors	129950 dollars for equipment calibration				0.53595 --- FY00 May Earned Value Factor			
A5L	RENTALS	0000	NONE	C100S	Closure Site Services	Linear	4,823.53	Dollars
Factors	9000 Dollars				0.53595 --- FY00 May Earned Value Factor			
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	R100S	RMRS Salaried	Linear	12,862.75	Dollars
Factors	24000 dollars				0.53595 --- FY00 May Earned Value Factor			

Activity ID: 1HXXXJ4005

Description: Radiological Engineering FY06

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDN601-4	Radiological Engineering Supt to Site	0.96	each	HC	3.700	3.570	111.746	15.535	0	127.282	38.888	166.169
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	140.676	140.676	0	140.676
Total for Activity 1HXXXJ4005:						3.570	111.746	15.535	140.676	267.957	38.888	306.845

Line Item MTNHIDN601-4 - Radiological Engineering Supt to Site

BOE

Activity Scope:

Provides for radiological program resources necessary to perform and support activities that are tied to Site operations but are not specific to a building baseline. This WBS element provides for the direct-charged planning, administration, budget preparation, oversight, identification and corrective action of emerging Site radiological compliance requirements. Also includes Contract Technical Representative (CTR) responsibilities and support and funding for the Health Physics Instrumentation sub-contract.

Strategy:

Utilize appropriate skill mix to provide programmatic radiological support to Site Operations.

Regulatory Narrative:

Radiological Safety is driven by 10 CFR 835, Price Anderson Amendment Act (PAAA), DOE Radiological Control Standards (DOE-STD-1098-99) and several DOE orders.

Regulatory Drivers:

10 CFR 835, 10 CFR 830.120 and DOE Orders.

Hazard Narrative:

WBS No: 1HAJ40
Activity ID: 1HXXXJ4005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Radiological safety protection for public, workers and environment.

Cost/Risk Narrative:

N/A

Streamlining Text:

N/A

#***** Radiological Safety Management and Support
Line Item Scope:

Provide technical support services to Site Operations including review of radiological assessments, serve as Radiological Safety technical point of contact for PAAA and Lessons Learned program. Provide oversight and direction for RadCon Program. Serve as point of contact to provide interface/coordination for radiological issues. Identify emerging site operations radiological compliance issues; develop and/or coordinate corrective action of emerging issues requiring action. Ensure necessary documentation is provided for tracking into Site's Plant Action Tracking System (PATS). Ensure the site maintains compliance with the DOE's No Rad Added Program for property and waste releases. Maintain programmatic viability for Radiological Material Areas (RMA), contamination and radiation exposure control. Develop methodologies for determining radio-nuclide presence and associated health risks in conjunction with agreements with the DOE, EPA, Colorado Department of Public Health and Environment (CDPHE), coordinate and manage program compliance support budget, performance measures and reporting requirements. Prepare routine reporting of cost and schedule variance information. Provide administrative assistance and records management and control. Provide equipment accountability and control. Participate as technical authority in respiratory protection issues through the JCUSC and user worker groups. Support emergency protection readiness with Field Sampling Team resources. Act as liaison with visitor groups including the Arms Reduction Verification Project, RSDIC, and the media. Address DFNSB concerns relating to RE training and qualification.

BOE Assumptions: Quarterly activities for Operations radiological program compliance implementation. This BOE does not include the program management activities directly related to Site Operations programs and projects.

? Provide support for procedures development and maintenance required for regulatory compliance.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300B1-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 P080 Linear 1850 hours
RSPs, HSPs and technical basis documents (TBD) = 1900 hours/year
R631S A5C None Linear 4400 Dollars
Supplies including paper, binders, etc. = 4400 Dollars/year
Does not include costs for distribution of procedures.

? Provide programmatic compliance technical support.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 G010 Linear 0 hours
Radiological Improvement Report (RIR) and Lessons Learned Program = 1350 hrs/year
10 CFR 835 compliance records and data base = 500 hrs/year
R631S 750 E050 Linear 2650 hours
Radioactive Source Control Program = 1850 hrs/year
Radiation Generating Device Program = 800 hrs/year

? Provide support for the Site Property and Waste Release Program

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 P080 Linear 1850 hours
Property/Waste Unrestricted Release Program = 950 hrs/year
Develop and provide technical support to the SCO characterization program = 600 hrs/year
Provide annual review of P/WRE procedures = 100 hrs/year
Provide Onsite Transportation technical support = 80 hrs/year

WBS No: 1HAJ40
Activity ID: 1HXXXJ4005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Perform No Rad Added (NRA) program assessments = 80 hrs/year
Provide P/WRE implementation guidance = 40 hrs/year

? Provide support for the Site Respiratory Protection Program

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300c2-5 Spending Variance report for the staff currently holding the position described herein.

Dept./Cost Center EOC Skill Curve Resources

R660H A5H P080 Linear 60300 Dollars

Attend Respiratory Protection User Training classes = 80 hrs/year x \$50.25 = \$4020

Attend Respiratory Protection Advisory Committee meetings = 140 hrs/year x \$50.25 = \$7035

Investigate RP Safety Concerns/problems = 130 hrs/year x \$50.25 = \$6533

Support upgrades of RP Program equipment = 200 hrs/year x \$50.25 = \$10050

Provide vendor/procurement technical support = 100 hrs/year x \$50.25 = \$5025

Perform Bi-annual RP procedures update/review = 200 hrs/year x \$50.25 = \$10050

Develop technical procedures/bases = 150 hrs/year x \$50.25 = \$7538

Perform STE duties = 200 hrs/year x \$50.25 = \$10050

? Provide technical radiological support to Emergency Preparedness.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/NH7300G1-4 for the staff currently holding the position described herein. A5C estimates derived from vendor cost for providing calibration services and the number of instruments in inventory and by "best guess" estimate of consumables to be used in drill and actual emergency responses.

Dept./Cost Center EOC Skill Curve Resources

R631S 750 E050 Linear 850 hours

R631S A5C None Linear 23000 Dollars

Maintain the Field Sampling Team's response capability = 160 hrs/year

Provide training/qualification of OJT on FST = 240 hrs/year

Provide RE support of Site drills = 400 hrs/year

Perform FST/Rad EP procedure reviews = 50 hrs/year

Maintain supplies, equipment calibration = 23000 Dollars

? Provide technical oversight of the Site's Air Sampling/Monitoring Program

Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. This program ensures continued compliance to changing regulatory requirements and provides technical support in program application to changing Site mission and D&D of facilities.

Dept./Cost Center EOC Skill Curve Resources

R660H A5H P080 Linear 32663 Dollars

Provide tech. support to ensure regulatory compliance of the air sampling/monitoring program = 650 hrs/year x \$50.25 = \$32663

? Provide Radiological Engineering Technical and Administration support

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources

R631H A5H M020 Linear 102157 Dollars

Provide management support to Radiological Engineering = 1850hrs/year x \$55.22 = \$102157

Records Management support for Archiving = \$3,640

Technical Travel/Memberships = \$14,000

R631S 750 P080 Linear 1850 hours

Attend RSDIC chair/coordinate meetings = 400 hrs/year

Provide resolutions of safety concerns/RIR problems = 40 hrs/year

Investigate rad occurrences/support investigations = 150 hrs/year

Provide technical support to tours/VIPs = 400 hrs/year

Provide technical support to the Sites rad instrumentation program = 860 hrs/year

? Provide technical support to programs to control workers exposure pathways and to ensure Site regulatory compliance.

Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

WBS No: 1HAJ40
Activity ID: 1HXXXJ4005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Dept./Cost Center EOC Skill Curve Resources
R631H A5H m020 Linear 102157 Dollars
Provide technical support to Site ORC = 2 hrs/mtg. x 26 mtg = 52 hrs x \$55.22 = \$2871
Perform Site Technical Expert duties for glovebag/soft-sided containment, radiation surveys, Radiological Material Area and work/contamination control programs = 1500 hrs x \$55.22 = \$82830
Perform as Program Administrator for 10CFR835/RPP/SRCM compliance status = 298 hrs x \$55.22 = \$16456

? Provide Program Administrator support to source disposal program, property release and technical support to the Level "B" garment.
Historical Data Source - P&I Reporting System rpt_002a WDS Spending Variance Report; rpt_002_chrg detailed wadlet/nh7300K1-4 Spending Variance Report for the staff currently holding the positions described herein.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 P080 Linear 1850 Hours
Maintain B126 Authorization Basis, source custodian/disposal requirements = 350 hours
Perform STE duties for Level "B" garment = 500 hours
Perform Program Administration duties for Radiological Records Retention Program (RRRP) and Unrestricted Release of administrative Property (URAP) program = 1000 hours
*Being performed by SSOC employee

? Provide CTR and support for Health Physics Instrumentation.
Estimator's Experience - Estimator has been involved with developing and tracking RE activities/budgets for the last 5-6 years. Level of effort required to support sub-contractors source inspections and oversee the contract.

Dept./Cost Center EOC Skill Curve Resources
R631S 750 T050 Linear 200 hours
Provide RCT support to Sub-contractor = 200 hrs/year
R631S 750 P080 Linear 200 hours
Provide management support and oversight = 200 hrs/year
R631S 750 P080 Linear 800 hours
Provide technical radiological and CTR support to sub-contractor = 800 hrs/year
R252H 750 (P080) Linear 600 hours
Calibrate sources and calibration equipment in support of site rad. detection instrumentation = 600 hours/year
R631S 750 (P080) Linear 250 hours
Provide miscellaneous Technician support of HP instrumentation = 250 hrs/year
R631S A5L None Linear 4800 Dollars
Obtain necessary equipment for facility maintenance = 4800 Dollars/year
R631S A5C None Linear 50,000 Dollars
Provide for equipment upgrades, supplies, purchase of new instruments for testing = 50000 Dollars/year
New and upgraded instruments and equipment is required to meet changing technologies (obsolescence of existing equipment), increased survey throughput needs and more stringent release requirements that require more sensitive equipment.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	1.850.00	Hours
Factors	1850 hours		1 employees					
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	1.850.00	Hours
Factors	1850 hours		1 employees					
A55	SOURCE ONE	0000	NONE	K238S	Radiation Protection	Linear	5.720.00	Dollars
Factors	88 boxes		65 dollars					
A5C	SUPPLIES	0000	NONE	K238S	Radiation Protection	Linear	10.380.00	Dollars
Factors	10000 Dollars		1.038 sales tax					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	103.611.70	Dollars
Factors	103612 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	37.064.10	Dollars
Factors	37064.1 Dollars							

WBS No: 1HAJ50 Title: Radiological Safety Analytical Services

Activity ID: 1HAJ500001 Description: Radiological Safety Analytical Services

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
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WBS No: 1HAJ50
Activity ID: 1HAJ500001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost	Starts In FY	*
OPNCIN5146	Analysis Support for Technical Supt Proj	1.00	each	HC	0	0	1,233.701	0	1,233.701	0	1,233.701
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	65.263	65.263	0	65.263
Total for Activity 1HAJ500001:					0	0	1,233.701	65.263	1,298.964	0	1,298.964

Line Item OPNCIN5146 - Analysis Support for Technical Supt Proj

BOE

Line Item:

Source of Data:

Analytical Services requires offsite commercial laboratories to support current onsite laboratories in order to provide capabilities for analyses that cannot be performed onsite. This offsite capacity is needed for the following reasons:

1. Regulatory requirements for third party analysis verification.
2. Onsite laboratories do not possess the required capabilities to perform the requested analyses.
3. Current capacity cannot meet the required volume of analyses within the constrained time frame for performing the analyses.

The Analytical Projects Office (APO) maintains oversight of commercial laboratories and directs which analyses are to be performed by each commercial laboratory. This determination is based on technical expertise in performing the analysis, laboratory compliance with federal regulations and contractual requirements in the area of quality, safety, and accountability, and the cost competitiveness of the laboratory. Offsite commercial laboratories perform analyses on a variety of matrices including air, soil, water, waste, sludge, bioassay, and general. Normal turnaround time for an analysis is within 30 days, but high priority analyses (customer quick turnaround time) and critical analytical results (inhalations) can be accommodated more quickly, sometimes in as little as 24 hours or less. The program needs in conjunction with laboratory capacity and distance from RFETS will dictate how quickly analytical results can be obtained.

ANALYSES PERFORMED

This work package supports the offsite laboratory analyses of the following sample matrices:

- ? Nasal swabs,
- ? Routine and special urine samples,
- ? Routine and special fecal samples,
- ? Tissue samples.

Samples may be analyzed for one or more of the following radionuclides:

- ? Plutonium,
- ? Americium,
- ? Uranium,
- ? Tritium

The number and types of sample analyses budgeted was developed based on projections from data compiled from 1998.

ANALYSIS COSTS

The cost to perform each analysis listed above is based on negotiated contracts with a variety of offsite laboratories. These costs are a fixed unit price per analysis and include all costs associated with completion of analyses. Costs include sample tracking and analysis, fee/profit, hard copy data results, electronic deliverable data results, shipping cooler return, sample disposal, all quality control samples, method blanks, spikes, and duplicates.

ANALYSIS TURNAROUND TIME

Normal turnaround time from sample receipt to analytical results is within 30 days, but high priority analyses or critical analytical results can be accommodated in as little as 24 hours or less. Normal laboratory operations are to batch analyses (usually in groups of 10) to perform the actual analyses. The batching process allows for a larger volume of analyses to be performed and reduces the cost per unit of each analysis. If quick turnaround time analysis must be performed, the laboratory must run smaller batch sizes (potentially a single analysis for 24-hour turnaround times). Reduced batch runs create inefficiencies within the laboratory due to lower capabilities and higher per unit costs. The program needs in conjunction with laboratory capacity will dictate how quickly analytical results can be obtained.

SHIPPING AND HANDLING

A subcontractor performs all functions for sample receipt, chain-of-custody, sample packaging, sample shipping, and sample tracking. The subcontractor also orders bioassay kits and packaging supplies.

The fixed unit price for analyses requiring priority and rush turnaround times are detailed in the basis of estimate and vary dependent on the type of analysis performed.

Strategy:

Utilize appropriate commercial laboratories to provide programmatic analytical laboratory support to Site radiological operations.

WBS No: 1HAJ50
Activity ID: 1HAJ500001

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Regulatory Narrative:

The bioassay program is driven by 10 CFR 835 and several DOE orders, including the Department of Energy Laboratory Accreditation Program.

Regulatory Drivers:

Federal Regulations and DOE Orders.

Hazard Narrative:

Radiological Health protection for public, workers and environment.

Cost/Risk Narrative:

N/A

Streamlining Text:

N/A

#***** Analytical Support for Technical Support Projects

Line Item Scope:

Provide offsite analytical services to Radiological Health and Site radiological workers for bioassay samples used to determine if intakes of radioactive materials occurred. The program, including the analytical laboratories under contract for this work, must gain and maintain compliance with the DOE Laboratory Accreditation Program (DOELAP). This work package provides for funds necessary to analyze the projected number and types of bioassay samples in support of the Radiological Health Program.

BOE Assumptions: This BOE assumes the same number of radiation workers (top tier contractors and sub-contractors) as in FY99. The BOE only includes the subcontract dollars necessary for analyzing the projected sample load.

? Analytical Laboratory Support

Dept./Cost Center EOC Skill Curve Resources

K267S A5H Linear \$1,500,000

Detailed analysis spreadsheet can be found in Radiological Health Office. Contact S. Baker X2452.

Historical data source - sample projection from CY98 sample load.

Contact V. Ideker X3437 for contract/scope details.

Adjustment factor in FY01: Increased estimate by 36% expecting that FY00 actuals will overrun to \$1.1M and the increase in deact/decom/demolition will trigger an increase in activity here.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A58	ASI	0000	NONE	K238S	Radiation Protection	Linear	20.000.00	Dollars
Factors 20000 Dollars								
A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analytical Laboratory Services	Linear	1.213.701.00	Dollars
Factors 1500000 dollars								

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	39.321.05	Dollars
Factors 39321.1 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	25.941.98	Dollars
Factors 25942 Dollars								

Activity ID: 1HAJ500002 Description: Radiological Safety Analytical Services

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
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WBS No: 1HAJ50
Activity ID: 1HAJ500002

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

OPNCIN5146	Analysis Support for Technical Supt Proi	1.00	each	HC	0	0	0	1,233.701	0	1,233.701	0	1,233.701
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	183.918	183.918	0	183.918
Total for Activity 1HAJ500002:					0	0	0	1,233.701	183.918	1,417.620	0	1,417.620

Line Item OPNCIN5146 - Analysis Support for Technical Supt Proj

BOE

Analytical Services requires offsite commercial laboratories to support current onsite laboratories in order to provide capabilities for analyses that cannot be performed onsite. This offsite capacity is needed for the following reasons:

1. Regulatory requirements for third party analysis verification.
2. Onsite laboratories do not possess the required capabilities to perform the requested analyses.
3. Current capacity cannot meet the required volume of analyses within the constrained time frame for performing the analyses.

The Analytical Projects Office (APO) maintains oversight of commercial laboratories and directs which analyses are to be performed by each commercial laboratory. This determination is based on technical expertise in performing the analysis, laboratory compliance with federal regulations and contractual requirements in the area of quality, safety, and accountability, and the cost competitiveness of the laboratory. Offsite commercial laboratories perform analyses on a variety of matrices including air, soil, water, waste, sludge, bioassay, and general. Normal turnaround time for an analysis is within 30 days, but high priority analyses (customer quick turnaround time) and critical analytical results (inhalations) can be accommodated more quickly, sometimes in as little as 24 hours or less. The program needs in conjunction with laboratory capacity and distance from RFETS will dictate how quickly analytical results can be obtained.

ANALYSES PERFORMED

This work package supports the offsite laboratory analyses of the following sample matrices:

- ? Nasal swabs,
- ? Routine and special urine samples,
- ? Routine and special fecal samples,
- ? Tissue samples.

Samples may be analyzed for one or more of the following radionuclides:

- ? Plutonium,
- ? Americium,
- ? Uranium,
- ? Tritium

The number and types of sample analyses budgeted was developed based on projections from data compiled from 1998.

ANALYSIS COSTS

The cost to perform each analysis listed above is based on negotiated contracts with a variety of offsite laboratories. These costs are a fixed unit price per analysis and include all costs associated with completion of analyses. Costs include sample tracking and analysis, fee/profit, hard copy data results, electronic deliverable data results, shipping cooler return, sample disposal, all quality control samples, method blanks, spikes, and duplicates.

ANALYSIS TURNAROUND TIME

Normal turnaround time from sample receipt to analytical results is within 30 days, but high priority analyses or critical analytical results can be accommodated in as little as 24 hours or less. Normal laboratory operations are to batch analyses (usually in groups of 10) to perform the actual analyses. The batching process allows for a larger volume of analyses to be performed and reduces the cost per unit of each analysis. If quick turnaround time analysis must be performed, the laboratory must run smaller batch sizes (potentially a single analysis for 24-hour turnaround times). Reduced batch runs create inefficiencies within the laboratory due to lower capabilities and higher per unit costs. The program needs in conjunction with laboratory capacity will dictate how quickly analytical results can be obtained.

SHIPPING AND HANDLING

A subcontractor performs all functions for sample receipt, chain-of-custody, sample packaging, sample shipping, and sample tracking. The subcontractor also orders bioassay kits and packaging supplies.

The fixed unit price for analyses requiring priority and rush turnaround times are detailed in the basis of estimate and vary dependent on the type of analysis performed.

Strategy:

Utilize appropriate commercial laboratories to provide programmatic analytical laboratory support to Site radiological operations.

Regulatory Narrative:

The bioassay program is driven by 10 CFR 835 and several DOE orders, including the Department of Energy Laboratory Accreditation Program.

Regulatory Drivers:

WBS No: 1HAJ50
Activity ID: 1HAJ500002

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter * *Starts In FY* *

Federal Regulations and DOE Orders.

Hazard Narrative:

Radiological Health protection for public, workers and environment.

Cost/Risk Narrative:

N/A

Streamlining Text:

N/A

***** Analytical Support for Technical Support Projects

Line Item Scope:

Provide offsite analytical services to Radiological Health and Site radiological workers for bioassay samples used to determine if intakes of radioactive materials occurred. The program, including the analytical laboratories under contract for this work, must gain and maintain compliance with the DOE Laboratory Accreditation Program (DOELAP). This work package provides for funds necessary to analyze the projected number and types of bioassay samples in support of the Radiological Health Program.

BOE Assumptions: This BOE assumes the same number of radiation workers (top tier contractors and sub-contractors) as in FY99. The BOE only includes the subcontract dollars necessary for analyzing the projected sample load.

? Analytical Laboratory Support
Dept./Cost Center EOC Skill Curve Resources
K267S A5H Linear \$1,520,000
Detailed analysis spreadsheet can be found in Radiological Health Office. Contact S. Baker X2452.
Historical data source - sample projection from CY98 sample load.
Contact V. Ideker X3437 for contract/scope details.

Adjustment factor in FY01: Increased estimate by 36% expecting that FY00 actuals will overrun to \$1.1M and the increase in deact/decom/demolition will trigger an increase in activity here.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A58	ASI		0000 NONE	K238S Radiation Protection	Linear	20.000.00	Dollars
Factors		20000 Dollars					
A5H	SUBCONTRACTED SRVS		0000 NONE	K267S Analytical Laboratory Services	Linear	1.213.701.00	Dollars
Factors		1500000 dollars					

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY		0000 NONE	ZDEPT No Department	Linear	126.265.50	Dollars
Factors		126266 Dollars					
ESC	ESCALATION		0000 NONE	ZDEPT No Department	Linear	57.652.64	Dollars
Factors		57652.6 Dollars					

Activity ID: 1HAJ500003 Description: Radiological Safety Analytical Services

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OPNCIN5146	Analysis Support for Technical Supt Proi	1.00	each	HC	0	0	0	800.875	0	800.875	0	800.875
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	221.485	221.485	0	221.485
Total for Activity 1HAJ500003:						0	0	800.875	221.485	1,022.360	0	1,022.360

WBS No: 1HAJ50
Activity ID: 1HAJ500003

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Line Item OPNCIN5146 - Analysis Support for Technical Supt Proj

BOE

Analytical Services requires offsite commercial laboratories to support current onsite laboratories in order to provide capabilities for analyses that cannot be performed onsite. This offsite capacity is needed for the following reasons:

1. Regulatory requirements for third party analysis verification.
2. Onsite laboratories do not possess the required capabilities to perform the requested analyses.
3. Current capacity cannot meet the required volume of analyses within the constrained time frame for performing the analyses.

The Analytical Projects Office (APO) maintains oversight of commercial laboratories and directs which analyses are to be performed by each commercial laboratory. This determination is based on technical expertise in performing the analysis, laboratory compliance with federal regulations and contractual requirements in the area of quality, safety, and accountability, and the cost competitiveness of the laboratory. Offsite commercial laboratories perform analyses on a variety of matrices including air, soil, water, waste, sludge, bioassay, and general. Normal turnaround time for an analysis is within 30 days, but high priority analyses (customer quick turnaround time) and critical analytical results (inhalations) can be accommodated more quickly, sometimes in as little as 24 hours or less. The program needs in conjunction with laboratory capacity and distance from RFETS will dictate how quickly analytical results can be obtained.

ANALYSES PERFORMED

This work package supports the offsite laboratory analyses of the following sample matrices:

- ? Nasal swabs,
- ? Routine and special urine samples,
- ? Routine and special fecal samples,
- ? Tissue samples.

Samples may be analyzed for one or more of the following radionuclides:

- ? Plutonium,
- ? Americium,
- ? Uranium,
- ? Tritium

The number and types of sample analyses budgeted was developed based on projections from data compiled from 1998.

ANALYSIS COSTS

The cost to perform each analysis listed above is based on negotiated contracts with a variety of offsite laboratories. These costs are a fixed unit price per analysis and include all costs associated with completion of analyses. Costs include sample tracking and analysis, fee/profit, hard copy data results, electronic deliverable data results, shipping cooler return, sample disposal, all quality control samples, method blanks, spikes, and duplicates.

ANALYSIS TURNAROUND TIME

Normal turnaround time from sample receipt to analytical results is within 30 days, but high priority analyses or critical analytical results can be accommodated in as little as 24 hours or less. Normal laboratory operations are to batch analyses (usually in groups of 10) to perform the actual analyses. The batching process allows for a larger volume of analyses to be performed and reduces the cost per unit of each analysis. If quick turnaround time analysis must be performed, the laboratory must run smaller batch sizes (potentially a single analysis for 24-hour turnaround times). Reduced batch runs create inefficiencies within the laboratory due to lower capabilities and higher per unit costs. The program needs in conjunction with laboratory capacity will dictate how quickly analytical results can be obtained.

SHIPPING AND HANDLING

A subcontractor performs all functions for sample receipt, chain-of-custody, sample packaging, sample shipping, and sample tracking. The subcontractor also orders bioassay kits and packaging supplies.

The fixed unit price for analyses requiring priority and rush turnaround times are detailed in the basis of estimate and vary dependent on the type of analysis performed.

Strategy:

Utilize appropriate commercial laboratories to provide programmatic analytical laboratory support to Site radiological operations.

Regulatory Narrative:

The bioassay program is driven by 10 CFR 835 and several DOE orders, including the Department of Energy Laboratory Accreditation Program.

Regulatory Drivers:

Federal Regulations and DOE Orders.

Hazard Narrative:

WBS No: 1HAJ50
Activity ID: 1HAJ500003

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

Radiological Health protection for public, workers and environment.

Cost/Risk Narrative:

N/A

Streamlining Text:

N/A

#***** Analytical Support for Technical Support Projects
Line Item Scope:

Provide offsite analytical services to Radiological Health and Site radiological workers for bioassay samples used to determine if intakes of radioactive materials occurred. The program, including the analytical laboratories under contract for this work, must gain and maintain compliance with the DOE Laboratory Accreditation Program (DOELAP). This work package provides for funds necessary to analyze the projected number and types of bioassay samples in support of the Radiological Health Program.

BOE Assumptions: This BOE assumes the same number of radiation workers (top tier contractors and sub-contractors) as in FY99. The BOE only includes the subcontract dollars necessary for analyzing the projected sample load.

? Analytical Laboratory Support
Dept./Cost Center EOC Skill Curve Resources
K267S A5H Linear \$1,520,000
Detailed analysis spreadsheet can be found in Radiological Health Office. Contact S. Baker X2452.
Historical data source - sample projection from CY98 sample load.
Contact V. Ideker X3437 for contract/scope details.

Adjustment factor in FY01: Increased estiamte by 36% expecting that FY00 actuals will overrun to \$1.1M and the increase in deact/decom/demolition will trigger an increase in activity here.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A58	ASI	0000	NONE	K238S	Radiation Protection	Linear	13.460.00Dollars
Factors		20000 Dollars		0.673	unilateral reduct		
A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analvtical Laboratory Services	Linear	787.415.40Dollars
Factors		1500000 dollars		0.673	unilateral reduct	0.964	
						0.80913	[SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	160.069.20Dollars
Factors		160069 Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	61.415.34Dollars
Factors		61415.3 Dollars					

Activity ID: 1HAJ500004 Description: Radiological Safetv Analytical Services

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OPNCIN5146	Analysis Support for Technical Supt Proj	1.00	each	HC	0	0	0	956.552	0	956.552	0	956.552
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	136.322	136.322	0	136.322
Total for Activity 1HAJ500004:						0	0	956.552	136.322	1.092.874	0	1.092.874

Line Item OPNCIN5146 - Analysis Support for Technical Supt Proj

BOE

Analytical Services requires offsite commercial laboratories to support current onsite laboratories in order to provide capabilities for analyses that cannot be performed onsite. This offsite capacity is needed for the following reasons:
1. Regulatory requirements for third party analysis verification.

WBS No: 1HAJ50
Activity ID: 1HAJ500004

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1HAJ
Activity Filter *

Starts In FY *

<p>2. Onsite laboratories do not possess the required capabilities to perform the requested analyses.</p> <p>3. Current capacity cannot meet the required volume of analyses within the constrained time frame for performing the analyses.</p> <p>The Analytical Projects Office (APO) maintains oversight of commercial laboratories and directs which analyses are to be performed by each commercial laboratory. This determination is based on technical expertise in performing the analysis, laboratory compliance with federal regulations and contractual requirements in the area of quality, safety, and accountability, and the cost competitiveness of the laboratory. Offsite commercial laboratories perform analyses on a variety of matrices including air, soil, water, waste, sludge, bioassay, and general. Normal turnaround time for an analysis is within 30 days, but high priority analyses (customer quick turnaround time) and critical analytical results (inhalations) can be accommodated more quickly, sometimes in as little as 24 hours or less. The program needs in conjunction with laboratory capacity and distance from RFETS will dictate how quickly analytical results can be obtained.</p> <p>ANALYSES PERFORMED</p> <p>This work package supports the offsite laboratory analyses of the following sample matrices:</p> <ul style="list-style-type: none">? Nasal swabs,? Routine and special urine samples,? Routine and special fecal samples,? Tissue samples. <p>Samples may be analyzed for one or more of the following radionuclides:</p> <ul style="list-style-type: none">? Plutonium,? Americium,? Uranium,? Tritium <p>The number and types of sample analyses budgeted was developed based on projections from data compiled from 1998.</p> <p>ANALYSIS COSTS</p> <p>The cost to perform each analysis listed above is based on negotiated contracts with a variety of offsite laboratories. These costs are a fixed unit price per analysis and include all costs associated with completion of analyses. Costs include sample tracking and analysis, fee/profit, hard copy data results, electronic deliverable data results, shipping cooler return, sample disposal, all quality control samples, method blanks, spikes, and duplicates.</p> <p>ANALYSIS TURNAROUND TIME</p> <p>Normal turnaround time from sample receipt to analytical results is within 30 days, but high priority analyses or critical analytical results can be accommodated in as little as 24 hours or less. Normal laboratory operations are to batch analyses (usually in groups of 10) to perform the actual analyses. The batching process allows for a larger volume of analyses to be performed and reduces the cost per unit of each analysis. If quick turnaround time analysis must be performed, the laboratory must run smaller batch sizes (potentially a single analysis for 24-hour turnaround times). Reduced batch runs create inefficiencies within the laboratory due to lower capabilities and higher per unit costs. The program needs in conjunction with laboratory capacity will dictate how quickly analytical results can be obtained.</p> <p>SHIPPING AND HANDLING</p> <p>A subcontractor performs all functions for sample receipt, chain-of-custody, sample packaging, sample shipping, and sample tracking. The subcontractor also orders bioassay kits and packaging supplies.</p> <p>The fixed unit price for analyses requiring priority and rush turnaround times are detailed in the basis of estimate and vary dependent on the type of analysis performed.</p> <p>Strategy:</p> <p>Utilize appropriate commercial laboratories to provide programmatic analytical laboratory support to Site radiological operations.</p> <p>Regulatory Narrative:</p> <p>The bioassay program is driven by 10 CFR 835 and several DOE orders, including the Department of Energy Laboratory Accreditation Program.</p> <p>***** Analytical Support for Technical Support Projects</p> <p>Line Item Scope:</p> <p>Provide offsite analytical services to Radiological Health and Site radiological workers for bioassay samples used to determine if intakes of radioactive materials occurred. The program, including the analytical laboratories under contract for this work, must gain and maintain compliance with the DOE Laboratory Accreditation Program (DOELAP). This work package provides for funds necessary to analyze the projected number and types of bioassay samples in support of the Radiological Health Program.</p> <p>BOE Assumptions: This BOE assumes the same number of radiation workers (top tier contractors and sub-contractors) as in FY99. The BOE only includes the subcontract dollars necessary for analyzing the projected sample load.</p>
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WBS No: 1HAJ50
Activity ID: 1HAJ500004

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? Analytical Laboratory Support
Dept./Cost Center EOC Skill Curve Resources
K267S A5H Linear \$1,822,000
Detailed analysis spreadsheet can be found in Radiological Health Office. Contact S. Baker X2452.
Historical data source - sample projection from CY98 sample load.
Contact V. Ideker X3437 for contract/scope details.

Adjustment Factor: Increase 60% from FY00 due to large number of terminations planned at the end of FY04.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A58	ASI		0000 NONE	K238S Radiation Protection	Linear	14,234.00	Dollars
Factors		22000 Dollars		0.647 unilateral reduct			
A5H	SUBCONTRACTED SRVS		0000 NONE	K267S Analytical Laboratory Services	Linear	942,317.80	Dollars
Factors		1800000 dollars		0.647 unilateral reduct			

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY		0000 NONE	ZDEPT No Department	Linear	44,477.93	Dollars
Factors		44477.9 Dollars					
ESC	ESCALATION		0000 NONE	ZDEPT No Department	Linear	91,844.53	Dollars
Factors		91844.5 Dollars					

Activity ID: 1HAJ500005 Description: Radiological Safety Analytical Services

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OPNCIN5146	Analysis Support for Technical Supt Proj	1.00	each	HC	0	0	0	196,810	0	196,810	0	196,810
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	105,016	105,016	0	105,016
Total for Activity 1HAJ500005:						0	0	196,810	105,016	301,826	0	301,826

Line Item OPNCIN5146 - Analysis Support for Technical Supt Proj

BOE

Analytical Services requires offsite commercial laboratories to support current onsite laboratories in order to provide capabilities for analyses that cannot be performed onsite. This offsite capacity is needed for the following reasons:
1. Regulatory requirements for third party analysis verification.
2. Onsite laboratories do not possess the required capabilities to perform the requested analyses.
3. Current capacity cannot meet the required volume of analyses within the constrained time frame for performing the analyses.

The Analytical Projects Office (APO) maintains oversight of commercial laboratories and directs which analyses are to be performed by each commercial laboratory. This determination is based on technical expertise in performing the analysis, laboratory compliance with federal regulations and contractual requirements in the area of quality, safety, and accountability, and the cost competitiveness of the laboratory. Offsite commercial laboratories perform analyses on a variety of matrices including air, soil, water, waste, sludge, bioassay, and general. Normal turnaround time for an analysis is within 30 days, but high priority analyses (customer quick turnaround time) and critical analytical results (inhalations) can be accommodated more quickly, sometimes in as little as 24 hours or less. The program needs in conjunction with laboratory capacity and distance from RFETS will dictate how quickly analytical results can be obtained.

ANALYSES PERFORMED

This work package supports the offsite laboratory analyses of the following sample matrices:

? Nasal swabs,
? Routine and special urine samples,
? Routine and special fecal samples,
? Tissue samples.

Samples may be analyzed for one or more of the following radionuclides:

? Plutonium,
? Americium,
? Uranium,

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Activity ID: 1HAJ500005

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? Tritium

The number and types of sample analyses budgeted was developed based on projections from data compiled from 1998.

ANALYSIS COSTS

The cost to perform each analysis listed above is based on negotiated contracts with a variety of offsite laboratories. These costs are a fixed unit price per analysis and include all costs associated with completion of analyses. Costs include sample tracking and analysis, fee/profit, hard copy data results, electronic deliverable data results, shipping cooler return, sample disposal, all quality control samples, method blanks, spikes, and duplicates.

ANALYSIS TURNAROUND TIME

Normal turnaround time from sample receipt to analytical results is within 30 days, but high priority analyses or critical analytical results can be accommodated in as little as 24 hours or less. Normal laboratory operations are to batch analyses (usually in groups of 10) to perform the actual analyses. The batching process allows for a larger volume of analyses to be performed and reduces the cost per unit of each analysis. If quick turnaround time analysis must be performed, the laboratory must run smaller batch sizes (potentially a single analysis for 24-hour turnaround times). Reduced batch runs create inefficiencies within the laboratory due to lower capabilities and higher per unit costs. The program needs in conjunction with laboratory capacity will dictate how quickly analytical results can be obtained.

SHIPPING AND HANDLING

A subcontractor performs all functions for sample receipt, chain-of-custody, sample packaging, sample shipping, and sample tracking. The subcontractor also orders bioassay kits and packaging supplies.

The fixed unit price for analyses requiring priority and rush turnaround times are detailed in the basis of estimate and vary dependent on the type of analysis performed.

Strategy:

Utilize appropriate commercial laboratories to provide programmatic analytical laboratory support to Site radiological operations.

Regulatory Narrative:

The bioassay program is driven by 10 CFR 835 and several DOE orders, including the Department of Energy Laboratory Accreditation Program.

Regulatory Drivers:

Federal Regulations and DOE Orders.

Hazard Narrative:

Radiological Health protection for public, workers and environment.

Cost/Risk Narrative:

N/A

Streamlining Text:

N/A

#***** Analytical Support for Technical Support Projects
Line Item Scope:

Provide offsite analytical services to Radiological Health and Site radiological workers for bioassay samples used to determine if intakes of radioactive materials occurred. The program, including the analytical laboratories under contract for this work, must gain and maintain compliance with the DOE Laboratory Accreditation Program (DOELAP). This work package provides for funds necessary to analyze the projected number and types of bioassay samples in support of the Radiological Health Program.

BOE Assumptions: This BOE assumes the same number of radiation workers (top tier contractors and sub-contractors) as in FY99. The BOE only includes the subcontract dollars necessary for analyzing the projected sample load.

? Analytical Laboratory Support

Dept./Cost Center EOC Skill Curve Resources
K267S A5H Linear \$1,247,000

Detailed analysis spreadsheet can be found in Radiological Health Office. Contact S. Baker X2452.

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Activity ID: 1HAJ500005

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Historical data source - sample projection from CY98 sample load.
Contact V. Ideker X3437 for contract/scope details.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A58	ASI		0000 NONE	K238S Radiation Protection	Linear	1.000.00	Dollars
Factors		1000 Dollars					
A5H	SUBCONTRACTED SRVS		0000 NONE	K267S Analytical Laboratory Services	Linear	195.810.50	Dollars
Factors		242000 dollars					

0.80913 [SYS 061400] .80704 - System

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY		0000 NONE	ZDEPT No Department	Linear	74.526.90	Dollars
Factors		74526.9 Dollars					
ESC	ESCALATION		0000 NONE	ZDEPT No Department	Linear	30.488.99	Dollars
Factors		30489 Dollars					

Activity ID: 1HAJ5000P2 Description: Analytical Labs FY00

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OPNCIN5146	Analysis Support for Technical Supt Proj	1.00	each	HC	0	0	0	500.436	0	500.436	0	500.436
Total for Activity 1HAJ5000P2:						0	0	500.436	0	500.436	0	500.436

Line Item OPNCIN5146 - Analysis Support for Technical Supt Proj

BOE

The cost to perform the analyses listed above is based on negotiated contracts with a variety of offsite commercial laboratories (currently 12 different laboratories under contract). These costs are a fixed unit price per analysis and include all costs associated with completion of analyses including direct and indirect costs associated with all tasks required to perform the analysis, fee/profit, hard copy data results, electronic deliverable data results, shipping cooler return, sample disposal, all quality control samples, method blanks, spikes, and duplicates. Estimated costs based on approved contract and corresponding statement of work.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A58	ASI		0000 NONE	K238S Radiation Protection	Linear	3.327.70	Dollars
Factors		6209 Dollars					
A5H	SUBCONTRACTED SRVS		0000 NONE	K267S Analytical Laboratory Services	Linear	36.366.00	Dollars
Factors		36366 dollars					
		EOY adjustment					
A5H	SUBCONTRACTED SRVS		0000 NONE	K267S Analytical Laboratory Services	Linear	460.741.90	Dollars
Factors		859677 dollars					
		0.53595 --- FY00 May Earned Value Factor					

Activity ID: 1HXXXJ5005 Description: Radiological Safety Analytical Services - FY06

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OPNCIN5146	Analysis Support for Technical Supt Proj	0.96	each	HC	0	0	0	189.905	0	189.905	0	189.905
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	160.770	160.770	0	160.770
Total for Activity 1HXXXJ5005:						0	0	189.905	160.770	350.675	0	350.675

Line Item OPNCIN5146 - Analysis Support for Technical Supt Proj

BOE

Analytical Services requires offsite commercial laboratories to support current onsite laboratories in order to provide capabilities for analyses that cannot be performed onsite. This offsite capacity is needed for the following reasons:
1. Regulatory requirements for third party analysis verification.
2. Onsite laboratories do not possess the required capabilities to perform the requested analyses.
3. Current capacity cannot meet the required volume of analyses within the constrained time frame for performing the analyses.

The Analytical Projects Office (APO) maintains oversight of commercial laboratories and directs which analyses are to be performed by each commercial laboratory. This determination is based on technical expertise in performing the analysis, laboratory compliance with federal regulations and contractual requirements in the area of quality, safety, and accountability, and the cost competitiveness of the laboratory. Offsite commercial laboratories perform analyses on a variety of matrices including air, soil, water, waste, sludge, bioassay, and general. Normal turnaround time for an analysis is within 30 days, but high priority analyses (customer quick turnaround time) and critical analytical results (inhalations) can be accommodated more quickly, sometimes

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in as little as 24 hours or less. The program needs in conjunction with laboratory capacity and distance from RFETS will dictate how quickly analytical results can be obtained.

ANALYSES PERFORMED

This work package supports the offsite laboratory analyses of the following sample matrices:

- ? Nasal swabs,
- ? Routine and special urine samples,
- ? Routine and special fecal samples,
- ? Tissue samples.

Samples may be analyzed for one or more of the following radionuclides:

- ? Plutonium,
- ? Americium,
- ? Uranium,
- ? Tritium

The number and types of sample analyses budgeted was developed based on projections from data compiled from 1998.

ANALYSIS COSTS

The cost to perform each analysis listed above is based on negotiated contracts with a variety of offsite laboratories. These costs are a fixed unit price per analysis and include all costs associated with completion of analyses. Costs include sample tracking and analysis, fee/profit, hard copy data results, electronic deliverable data results, shipping cooler return, sample disposal, all quality control samples, method blanks, spikes, and duplicates.

ANALYSIS TURNAROUND TIME

Normal turnaround time from sample receipt to analytical results is within 30 days, but high priority analyses or critical analytical results can be accommodated in as little as 24 hours or less. Normal laboratory operations are to batch analyses (usually in groups of 10) to perform the actual analyses. The batching process allows for a larger volume of analyses to be performed and reduces the cost per unit of each analysis. If quick turnaround time analysis must be performed, the laboratory must run smaller batch sizes (potentially a single analysis for 24-hour turnaround times). Reduced batch runs create inefficiencies within the laboratory due to lower capabilities and higher per unit costs. The program needs in conjunction with laboratory capacity will dictate how quickly analytical results can be obtained.

SHIPPING AND HANDLING

A subcontractor performs all functions for sample receipt, chain-of-custody, sample packaging, sample shipping, and sample tracking. The subcontractor also orders bioassay kits and packaging supplies.

The fixed unit price for analyses requiring priority and rush turnaround times are detailed in the basis of estimate and vary dependent on the type of analysis performed.

Strategy:

Utilize appropriate commercial laboratories to provide programmatic analytical laboratory support to Site radiological operations.

Regulatory Narrative:

The bioassay program is driven by 10 CFR 835 and several DOE orders, including the Department of Energy Laboratory Accreditation Program.

Regulatory Drivers:

Federal Regulations and DOE Orders.

Hazard Narrative:

Radiological Health protection for public, workers and environment.

Cost/Risk Narrative:

N/A

Streamlining Text:

N/A

***** Analytical Support for Technical Support Projects
Line Item Scope:

WBS No: 1HAJ50
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Provide offsite analytical services to Radiological Health and Site radiological workers for bioassay samples used to determine if intakes of radioactive materials occurred. The program, including the analytical laboratories under contract for this work, must gain and maintain compliance with the DOE Laboratory Accreditation Program (DOELAP). This work package provides for funds necessary to analyze the projected number and types of bioassay samples in support of the Radiological Health Program.

BOE Assumptions: This BOE assumes the same number of radiation workers (top tier contractors and sub-contractors) as in FY99. The BOE only includes the subcontract dollars necessary for analyzing the projected sample load.

? Analytical Laboratory Support
Dept./Cost Center EOC Skill Curve Resources
K267S A5H Linear \$1,247,000
Detailed analysis spreadsheet can be found in Radiological Health Office. Contact S. Baker X2452.
Historical data source - sample projection from CY98 sample load.
Contact V. Ideker X3437 for contract/scope details.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	A58	ASI		0000	NONE	K238S	Radiation Protection	Linear	1,000.00	Dollars
	Factors 1000 Dollars									
	A5H	SUBCONTRACTED SRVS		0000	NONE	K267S	Analytical Laboratory Services	Linear	195,810.50	Dollars
	Factors 242000 dollars									

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Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	118,411.50	Dollars
	Factors 118412 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	42,358.30	Dollars
	Factors 42358.3 Dollars								

WBS No: 1HAJ60 Title: RS Health Physics Instrumentation

Activity ID: 1HAJ600001 Description: RS Health Physics Instrumentation FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDE601	Provide CTR and Support for HPI	1.00	each	HC	2,550	2,550	63,841	45,528	0	109,369	30,452	139,820
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	7,397	7,397	0	7,397
Total for Activity 1HAJ600001:						2,550	63,841	45,528	7,397	116,765	30,452	147,217

Line Item MTNHIDE601 - Provide CTR and Support for HPI

BOE

Line Item: CTR support and oversight to the Alpha Group LLC fixed price contract whereby instrumentation maintenance and repair is provided to the Site. This activity supports nonproject specific needs.

Source of Data: FY99 and FY00 data

Request for additional detail should be addressed to the Activity manager S. Pike

Labor supports Radiological Engineering studies and experimentation for instrumentation. Includes steelworker technician support.
Supplies support purchase of repair and purchase of instrumentation to the Radiological Safety Program organization.
Rental is for GSA vehicles (1 pickup and 2 cushion) to support the Site as far as movement of instrumentation.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	800.00	Hours
	Factors	800	hours						
	750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFF	K238S	Radiation Protection	Linear	200.00	Hours
	Factors	200	hrs						
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KH10H	EESH&Q Steelworkers	Linear	200.00	Hours
	Factors	200	hours						

WBS No: 1HAJ60
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750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KH10H	EESH&Q Steelworkers	Linear	750.00	Hours
Factors	750	hours						
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KH10H	EESH&Q Steelworkers	Linear	600.00	Hours
Factors	600	hours						
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	41.520.00	Dollars
Factors	40000	dollars	1.038	USE TAX				
A5L	RENTALS	0000	NONE	C232S	NG Vehicle/Equip Maintenance	Linear	4.008.00	Dollars
Factors	4008	Dollars						

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	4.456.42	Dollars
Factors	4456.42 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2.940.11	Dollars
Factors	2940.11 Dollars							

Activity ID: 1HAJ600002 Description: RS Health Physics Instrumentation FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDE601	Provide CTR and Support for PHI	1.00	each	HC	2.550	2.550	63.841	35.148	0	98.989	22.536	121.524
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	18.117	18.117	0	18.117
Total for Activity 1HAJ600002:						2.550	63.841	35.148	18.117	117.105	22.536	139.641

Line Item MTNHIDE601 - Provide CTR and Support for PHI

BOE

Line Item: CTR support and oversight to the Alpha Group LLC fixed price contract whereby instrumentation maintenance and repair is provided to the Site. This activity supports nonproject specific needs.

Source of Data: FY99 and FY00 data

Request for additional detail should be addressed to the Activity manager S. Pike

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	800.00	Hours
Factors	800	hours Tech Rad & CTR support							
750	STRAIGHT TIME BASE		P170	OTHER ADMINISTRATIVE & PROFE	K238S	Radiation Protection	Linear	200.00	Hours
Factors	200	hrs mamt support & oversight							
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLIGI	KH10H	EESH&Q Steelworkers	Linear	600.00	Hours
Factors	600	hours							
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLIGI	KH10H	EESH&Q Steelworkers	Linear	200.00	Hours
Factors	200	hours RCT support							
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLIGI	KH10H	EESH&Q Steelworkers	Linear	750.00	Hours
Factors	750	hours							
A5C	SUPPLIES		0000	NONE	R100S	RMRS Salaried	Linear	31.140.00	Dollars
Factors	30000	USE TAX	1.038						
A5L	RENTALS		0000	NONE	C232S	NG Vehicle/Equip Maintenance	Linear	4.008.00	Dollars
Factors	4008	Dollars							

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	12.437.62	Dollars
Factors	12437.6 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	5.679.00	Dollars
Factors	5679.00 Dollars							

Activity ID: 1HAJ600003 Description: RS Health Physics Instrumentation FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
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WBS No: 1HAJ60
Activity ID: 1HAJ600003

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Baseline Cost and Basis of Estimate

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			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost	Starts In FY	*
MTNHIDE601	Provide CTR and Support for PHI	1.00	each	HC	1.716	1.716	42.965	16.669	0	14.866	74.499
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	20.603	20.603	0
Total for Activity 1HAJ600003:					1.716	42.965	16.669	20.603	80.237	14.866	95.102

Line Item MTNHIDE601 - Provide CTR and Support for PHI

BOE Line Item: CTR support and oversight to the Alpha Group LLC fixed price contract whereby instrumentation maintenance and repair is provided to the Site. This activity supports nonproject specific needs.

Source of Data: FY99 and FY00 data

Request for additional detail should be addressed to the Activity manager S. Pike

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	R100S RMRS Salaried	Linear	538.40	Hours
Factors	800 hours Tech Rad & CTR support		0.673 unilateral reduct			
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	K238S Radiation Protection	Linear	134.60	Hours
Factors	200 hrs maint support & oversight		0.673 unilateral reduct			
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KH10H EESH&Q Steelworkers	Linear	134.60	Hours
Factors	200 hours RCT support		0.673 unilateral reduct			
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KH10H EESH&Q Steelworkers	Linear	403.80	Hours
Factors	600 hours		0.673 unilateral reduct			
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KH10H EESH&Q Steelworkers	Linear	504.75	Hours
Factors	750 hours		0.673 unilateral reduct			
	A5C SUPPLIES	0000 NONE	R100S RMRS Salaried	Linear	13.971.48	Dollars
Factors	20000 USE TAX	1.038	0.673 unilateral reduct			
	A5L RENTALS	0000 NONE	C232S NG Vehicle/Equip Maintenance	Linear	2.697.38	Dollars
Factors	4008 Dollars		0.673 unilateral reduct			

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	14.890.00	Dollars
Factors	14890 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	5.713.00	Dollars
Factors	5713 Dollars					

Activity ID: 1HAJ600004 Description: RS Health Physics Instrumentation FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDE601	Provide CTR and Support for PHI	1.00	each	HC	1.650	1.650	41.305	9.309	0	50.614	11.648	62.262
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	8.873	8.873	0	8.873
Total for Activity 1HAJ600004:						1.650	41.305	9.309	8.873	59.487	11.648	71.135

Line Item MTNHIDE601 - Provide CTR and Support for PHI

BOE Line Item: CTR support and oversight to the Alpha Group LLC fixed price contract whereby instrumentation maintenance and repair is provided to the Site. This activity supports nonproject specific needs.

Source of Data: FY99 and FY00 data

Request for additional detail should be addressed to the Activity manager S. Pike

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	R100S RMRS Salaried	Linear	517.60	Hours
Factors	800 hours		0.647 unilateral reduct			
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	K238S Radiation Protection	Linear	129.40	Hours
Factors	200 hours		0.647 unilateral reduct			
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KH10H EESH&Q Steelworkers	Linear	388.20	Hours
Factors	600 hours		0.647 unilateral reduct			

WBS No: 1HAJ60
Activity ID: 1HAJ600004

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750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KH10H	EESH&Q Steelworkers	Linear	129.40	Hours
Factors	200	hours			0.647 unilateral reduct			
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KH10H	EESH&Q Steelworkers	Linear	485.25	Hours
Factors	750	hours			0.647 unilateral reduct			
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	6,715.86	Dollars
Factors	10000	DOLLARS	1.038	USE TAX	0.647 unilateral reduct			
A5L	RENTALS	0000	NONE	C232S	NG Vehicle/Equio Maintenance	Linear	2,593.18	Dollars
Factors	4008	dollars			0.647 unilateral reduct			

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2,895.06	Dollars
Factors	2895.06 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	5,978.15	Dollars
Factors	5978.15 Dollars							

Activity ID: 1HAJ600005 Description: RS Health Physics Instrumentation FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDE601	Provide CTR and Support for PHI	1.00	each	HC	90	90	2,359	9,198	0	11,557	821	12,378
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	6,605	6,605	0	6,605
Total for Activity 1HAJ600005:						90	2,359	9,198	6,605	18,162	821	18,983

Line Item MTNHIDE601 - Provide CTR and Support for PHI

BOE

Line Item: CTR support and oversight to the Alpha Group LLC fixed price contract whereby instrumentation maintenance and repair is provided to the Site. This activity supports nonproject specific needs.

Source of Data: FY99 and FY00 data

Request for additional detail should be addressed to the Activity manager S. Pike

Resources

Cost Element			Skill		Department		Curve	Quantity	Units	
750	STRAIGHT TIME BASE		P080	HEALTH PHYSICISTS		R100S	RMRS Salaried	Linear	40.00	Hours
Factors	40	hours								
750	STRAIGHT TIME BASE		T050	RADIATION CONTROL TECHNOLOGI		KH10H	EESH&Q Steelworkers	Linear	50.00	Hours
Factors	50	hours								
A5C	SUPPLIES		0000	NONE		R100S	RMRS Salaried	Linear	5,190.00	Dollars
Factors	5000	DOLLARS		1.038	use tax					
A5L	RENTALS		0000	NONE		K238S	Radiation Protection	Linear	4,008.00	Dollars
Factors	4008	DOLLARS								

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	4,687.25	Dollars
Factors	4687.25 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	1,917.55	Dollars
Factors	1917.55 Dollars							

Activity ID: 1HAJ6000P2 Description: Health Physics Instrumentation FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDE601	Provide CTR and Support for PHI	1.00	each	HC	560	560	11,618	34,387	0	46,006	5,670	51,675
Total for Activity 1HAJ6000P2:						560	11,618	34,387	0	46,006	5,670	51,675

Line Item MTNHIDE601 - Provide CTR and Support for PHI

BOE

Source of Data - FY98 Actuals, Labor & ODC, downloaded to EXCEL and verified against Project F98SEP, 002 Detailed Wadlet/Chrg Spending Variance Report, 002a Wadlet/Charge No. Lvl Spending Variance Report and the 002a Wadlet Spending Variance Report. These historical documents are in the budget analyst's office.

WBS No: 1HAJ60
Activity ID: 1HAJ6000P2

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Starts In FY *

(NH724500/A1)
Item Desc: Ctr and Support for Health Physics Instrumentation (HPI)
Breakdown of Item Supported by Historical Data:
Item: CTR and General Support for HPI
Units: 1 lot
Unit Cost: 2,228 hours, \$732,248 other direct costs
Unit Cost Adjustment Factor: 322 hours/+14.5%, -\$676,196/-92% other direct costs
Revised Unit Cost: 2,550 hours, \$56,052 other direct costs

Basis for Adjustment: labor hours trended upward in accordance with actuals for FY99 Oct-Feb, subcontracted costs decreased for those costs which will be picked up by the projects. Supply dollars are used to purchase new instruments for testing and evaluation. The lease dollars cover a government vehicle to traverse the site during normal daily operations.

ACP 2000-5045:
Convert R631S/M020/0750 and R631S/P080/0750 to R631S/A5H/T040 to permit Alpha Group to perform instrument calibrations/repairs.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KH10H	EESH&Q Steelworkers	Linear	72.25	Hours
Factors	200 hours RCT support	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KH10H	EESH&Q Steelworkers	Linear	270.93	Hours
Factors	750 hours	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KH10H	EESH&Q Steelworkers	Linear	216.74	Hours
Factors	600 hours	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
A5C	SUPPLIES	0000	NONE	KH10H	EESH&Q Steelworkers	Linear	18,748.02	Dollars
Factors	50000 dollars	1.038	use tax adjustment factor of 3.8%	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor	
A5H	SUBCONTRACTED SRVS	0000	NONE	K238S	Radiation Protection	Linear	14,027.10	Dollars
Factors	38831.1 dollars	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor			
A5L	RENTALS	0000	NONE	C232S	NG Vehicle/Equip Maintenance	Linear	1,612.33	Dollars
Factors	1.038 use tax adjustment factor of 3.8%	4300	dollars for necessary equipment for	0.67401	January 2000 Earned Value Factor	0.53595	--- FY00 May Earned Value Factor	

Activity ID: 1HXXXJ6005

Description: RS Health Physics Instrumentation FY06

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
MTNHIDE601	Provide CTR and Support for PHI	0.96	each	HC	90	87	2,276	8,875	0	11,152	792	11,944
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	10,111	10,111	0	10,111
Total for Activity 1HXXXJ6005:						87	2,276	8,875	10,111	21,263	792	22,055

Line Item MTNHIDE601 - Provide CTR and Support for PHI

BOE

Line Item: CTR support and oversight to the Alpha Group LLC fixed price contract whereby instrumentation maintenance and repair is provided to the Site. This activity supports nonproject specific needs.

Source of Data: FY99 and FY00 data

Request for additional detail should be addressed to the Activity manager S. Pike

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	R100S	RMRS Salaried	Linear	40.00	Hours
Factors	40 hours							
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KH10H	EESH&Q Steelworkers	Linear	50.00	Hours
Factors	50 hours							
A5C	SUPPLIES	0000	NONE	R100S	RMRS Salaried	Linear	5,190.00	Dollars
Factors	5000 DOLLARS	1.038	use tax					
A5L	RENTALS	0000	NONE	K238S	Radiation Protection	Linear	4,008.00	Dollars
Factors	4008 DOLLARS							

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	7,447.30	Dollars
Factors	7447.3 Dollars							

WBS No: 1HAJ60
Activity ID: 1HXXXJ6005

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ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	Starts In FY	*
Factors		2664.06 Dollars						

Report Totals:

Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
Total	Total	Cost	& Escalation	Cost		
293.888	8,581,163	12,019,783	3,944,787	24,545,733	3,355,003	27,900,736